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Water Resources Data Indiana

Water Year 1983

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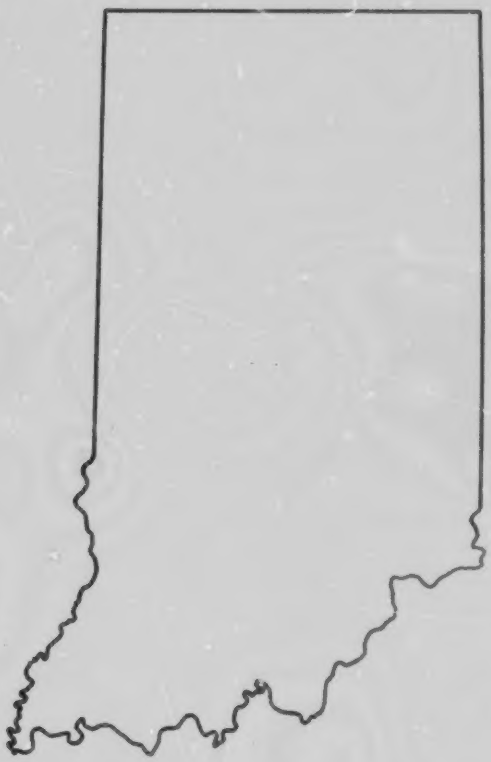

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-83-1

Prepared in cooperation with the State of Indiana
and with other agencies

CALENDAR FOR WATER YEAR 1983

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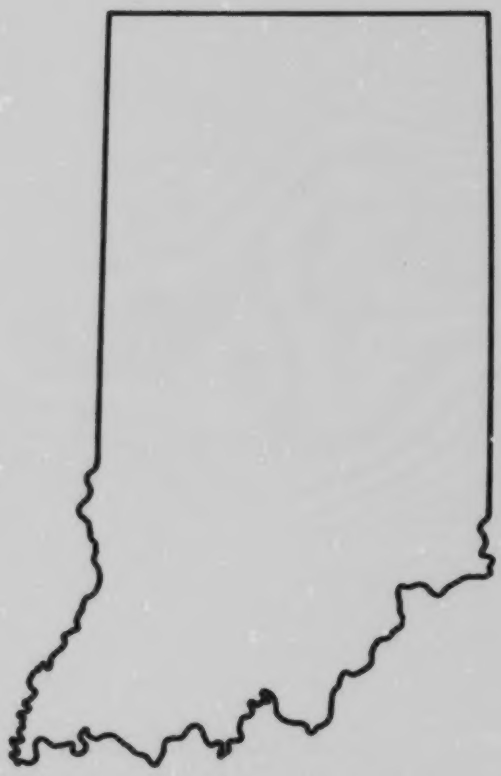
U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

1816

Water Resources Data Indiana

Water Year 1983

by R.L. Miller, R.E. Hoggatt, and G.E. Nell



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-83-1
Prepared in cooperation with the State of Indiana
and with other agencies

I

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
6023 Guion Road Suite 201
Indianapolis, Indiana 46254

1984

PREFACE

This volume of the annual hydrologic data report of Indiana is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Prepared in cooperation with the State of Indiana and with other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1983 water year for Indiana consists of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels in wells. This report contains discharge records for 174 gaging stations, stage and contents for 9 lake and reservoirs, releases from 7 flood control reservoirs, water quality for 5 gaging stations, and water levels for 84 observation wells. Also included are 23 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federl agencies in Indiana.

17. Document Analysis a. Descriptors

*Indiana, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperture, Water levels, Water analyses.

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(w-discharge, c-chemical, t-temperature, s-sediment)

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INTRODUCTION

Water resources data for the 1983 water year for Indiana consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 174 gaging stations; stage and contents at 9 lakes and reservoirs; water quality at 5 gaging stations, and water levels at 84 observation wells. Also included are data for 21 crest-stage. Locations of these sites are shown on figures 4, 5, and 6. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements. A systematic collection of stages on selected lakes was begun in 1943 in cooperation with the State of Indiana, Department of Natural Resources. For the 1983 water year, daily stage data was collected at 108 lakes. The data collected, since the beginning of record, has not been published in the annual water data reports for Indiana. They are available in the Indiana District Office. A selected amount of lake data was published in Water Supply Paper 1363 "Hydrology of Indiana Lakes" by J. I. Perrey and D. M. Corbett (1956). These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Indiana.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Virginia, 22202.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water- quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water have been published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IN-83-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (317) 927-8640.

COOPERATION

The U.S. Geological Survey and organizations of the State of Indiana have had cooperative agreements for the systematic collection of streamflow records since 1930, for ground-water levels since 1940, for lake stages since 1943, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State of Indiana, Department of Natural Resources, James M. Ridenour, director, through Bureau of Water and Mineral Resources, W. J. Andrews, deputy director.

Indiana State Board of Health, R. G. Blankenbaker, M.D., commissioner, and Ralph C. Pickard, assistant commissioner for environmental health.

Indiana Department of Highways, G. K. Hallock, director

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for surface-water gaging stations and water-quality gaging stations published in this report.

The following organizations aided in collecting records: The cities of Columbus, Fort Wayne, and Indianapolis; Indianapolis Water Co., Indianapolis Power and Light Co., Public Service Co. of Indiana, Container Corporation of America, Northern Indiana Public Service Company, Hoosier Energy, and Sheller-Globe Corporation.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined as follows. See also table for converting inch-pound units to International System of units (SI) on inside of front cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

> Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.
>
> Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by micro-organisms, such as bacteria.

Cubic feet per second per day (ft^3/s)/day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile $(ft^3/s)/mi^2$, cfsm is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft^3/s, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

> Mean discharge (MEAN) is the arithmetic average of individual daily mean discharges during a specific period.
>
> Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (ft^3/s)".

Dissolved.—That material in a representative water sample which passes through a 0.45 mm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein may include an estimate of that portion of the total drainage area which does not contribute directly to surface runoff.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distant hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrolgic unit is identified by an 8-digit number.

Micrograms per liter (μg/L, G/L) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/L, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 9. Concentration of suspended sediment also is expressed in mg/L, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 9.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay............	0.00024 - 0.004	Sedimentation.
Silt............	.004 - .062	Sedimentation.
Sand............	.062 - 2.0	Sedimentation or sieve.
Gravel..........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Runoff in inches (IN) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

> Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.
>
> Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).
>
> Suspended-sediment discharge (tons per day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.
>
> Total-sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.
>
> Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25° C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids concentrations in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos/cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

WDR is used as an abbreviation for "Water Data Report" in the REVISED RECORD paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Table 1.—Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})	0.11119	Iodide (I^{-1})	0.00788
Ammonia as $NH_4{}^{+1}$	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate ($HCO_3{}^{-1}$)	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate ($CO_3{}^{-2}$)	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate ($NO_3{}^{-1}$)	.01613
Chromium (Cr^{+6})*	.11539	Nitrite ($NO_2{}^{-1}$)	.02174
Cobalt (Co^{+2})*	.03394	Phosphate ($PO_4{}^{-3}$)	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate ($SO_4{}^{-2}$)	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.—Factors for conversion of sediment concentrations in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by	Range of concentration in 1,000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-508	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indentation representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03335500, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "335500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines.

Records in this report are in Part 3 (Ohio River basin), Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). All records for drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS

Ground-water wells are listed alphabetically by counties in this report. Each well in Indiana carries dual-identification numbers. The first system is by a county name with a sequential number of the well, that is, number one is the first well in that county for which records were obtained. The second system is based on the latitude and longitude of the well. An additional identification of the well in this system is given following the seconds of longitude. Each well within the boundary of a particular second of latitude and longitude is numbered by tenths of a unit, with the first established well numbered as ".1".

SPECIAL NETWORK

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity tables gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the back cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS' on page 5.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE", it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given, first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Data collected at partial-record stations and miscellaneous sites are given in tables at the end of the surface-water records in this report.

Accuracy of data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/fs; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes or to other factors. For such stations,. figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States: there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Indiana for the period October 1960 to September 1965 are in Water-Supply Papers 1908, 1909, 1911, 1912, and 1915.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Indiana are compiled in Water-Supply Paper 1305, 1307, and 1308 through September 1950, and in 1725, 1727, and 1728 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Access to WATSTORE Data

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in prroducing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, within the format for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous-temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations, and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/L), and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/mL (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperatures in degrees Celsius to degrees Fehrenheit, see table 3 on page 20.

In October 1968 the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 3).

Water analysis

The methods of collecting and analyzing water samples for determining the kinds of concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on the back of the title page of this report.

Water temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the publish ed sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observe immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

Table 3.—Degrees Celsius (°C) to degrees Fahrenheit (°F)*
Temperature reported to nearest 0.5°C

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F -32) or °F = 9/5 °C +32.

In addition to the records of the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. The highest water levels in wells equipped with recording gages are reported for every fifth day and the end of each month. At the bottom of these tables are shown the minimum and maximum recorded water levels for the month and the minimum and maximum recorded water levels for the current water year.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

SUMMARY OF HYDROLOGIC CONDITIONS

Average annual rainfall across Indiana ranges from 34 inches in the north (except for area along Lake Michigan, which receives approximately 40 inches) to 46 inches in the south (National Oceanic and Atmospheric Administration, 1951-80). Moisture is available in each month of the year, but the spring months are usually the wettest throughout the State. Annual runoff is approximately one-third of precipitation.

In the fall of 1982 the mean monthly streamflow at each of the three index stations (Mississinewa River at Marion, Wabash River at Mt. Carmel and East Fork White River at Shoals) was near the median of monthly mean discharges for 1951-80 (fig. 1). (The median of monthly mean discharge removes the weighting caused by extreme high or low flows; thereby, giving a better representation of expected monthly flow.) Flooding in December was followed by decreasing streamflows. High flows in April and May were followed by near-median flows in the summer.

Temperature and precipitation at the three index stations were near normal for October and November and flow was median. December was warm and wet throughout most of the State. Record rainfall on December 4 in the Calumet region (northwest) caused record stage on Hart ditch and a near-record discharge on the Little Calumet River in Munster. Above-normal rainfall in southern Indiana caused flooding in lowland agricultural areas along the lower Wabash River from late December through January 1.

Below-normal precipitation was recorded throughout the State from January through March 1983. As a result, streamflows across the State declined.

Above-normal precipitation in April ended below-normal streamflow. Precipitation for April ranged from 4 to 12 inches. Local flooding in the Calumet area and minor flooding along the St. Marys, Maumee, and Tippecanoe Rivers resulted from the rains of April 2. The Kankakee River at Shelby remained above flood stage from April 3 until late May.

Precipitation in Indiana in May was greatest in the southern part of the State. Three to 7 inches of rain on April 30 and May 1 in the southwestern part of the State, caused many streams to overflow their banks. Recurrence intervals for peak discharges were generally less than 10 years. Exceptions were the 20-year recurrrence interval for Lost River near West Baden Springs and 15-year recurrence intervals for Patoka River at Princeton, Wildcat Creek at Lafayette and South Fork Wildcat Creek at Lafayette. Record high levels occurred at the following reservoirs in the State: Brookville Lake (highest since 1974), Monroe Lake (highest since 1966), and Patoka Lake (highest since 1978). Flows at two of the index stations (Wabash River at Mt. Carmel and East Fork White River at Shoals) were the highest for May since 1961.

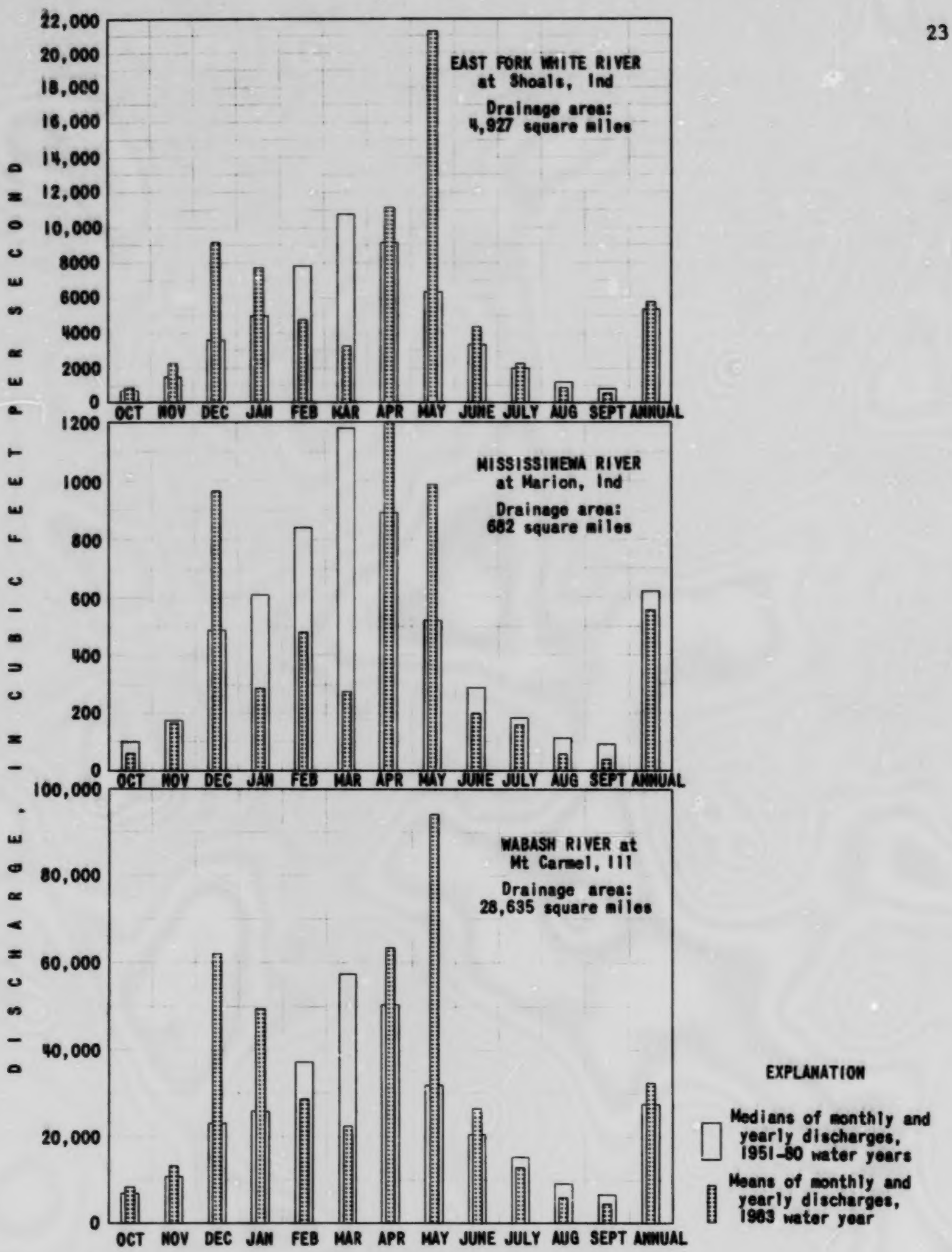


Figure 1.-- Mean discharges at Indiana index stations during 1983 water year and median discharges for period 1951-80.

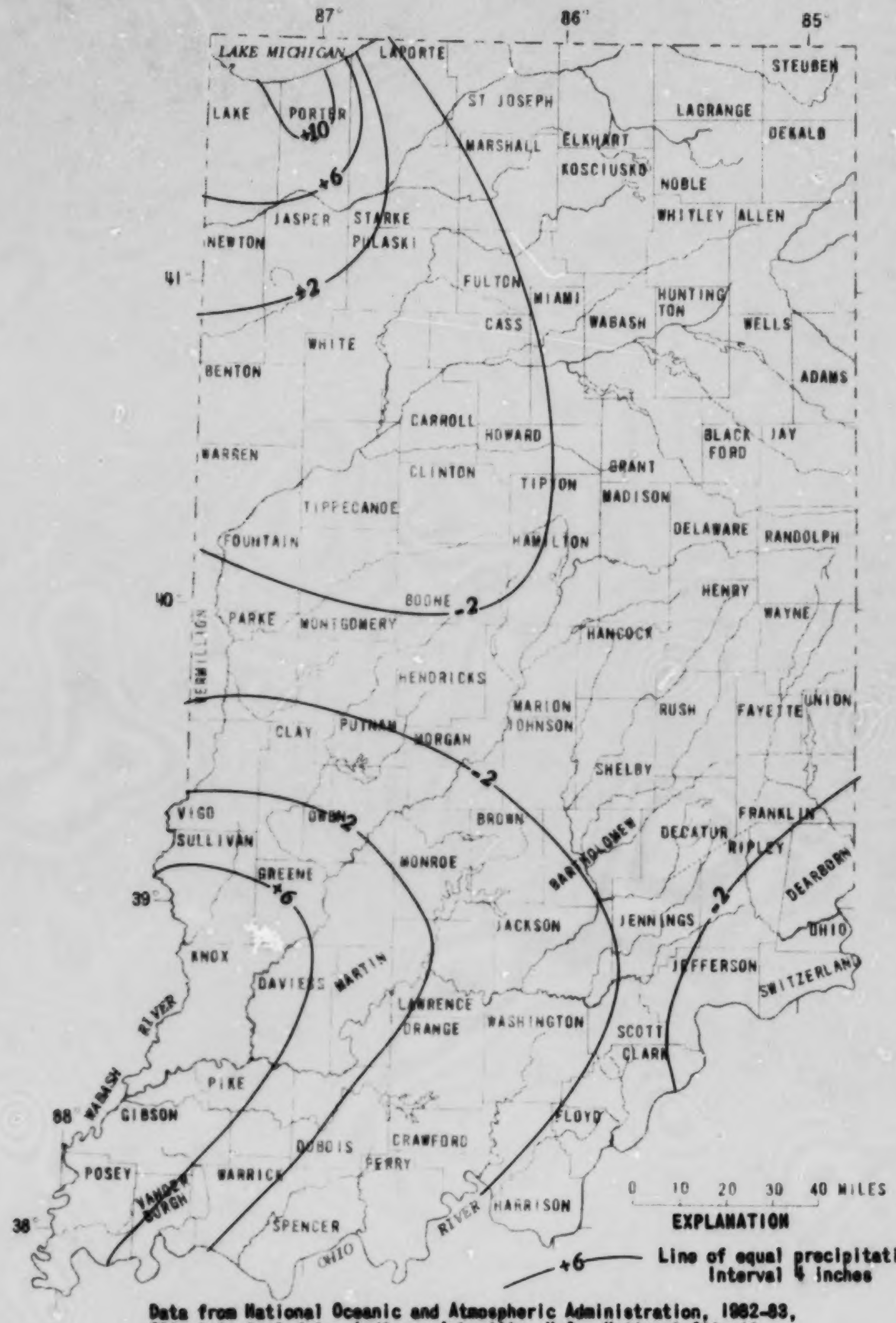
A general drying trend that began in June continued throughout the State until mid-September. By the last 2 weeks of June, the daily high temperature throughout much of the State exceeded 90° F and continued to exceed 90° F during July. The generally scattered precipitation caused little change in streamflow patterns because of the extremely dry soil before the rain. The only exception was the more than 7 inches rainfall on July 2 in northwestern Indiana, which caused flash flooding. Floods with recurrence intervals of 10 to 25 years were recorded at gaging stations on Deep River at Hobart and Salt Creek at McCool. Lowlands along the Kankakee River were also flooded as a result of the storm on July 2.

Scattered showers in August did not affect streamflow. A few streams in central Indiana were at or near their 10-year lows. Temperatures from June to August were the highest on record at Fort Wayne and South Bend; second highest, at Evansville; and sixth highest, at Indianapolis. High temperature and low precipitation throughout the State continued until the middle of September, when near seasonal conditions returned. However, streamflows had not returned to normal by the end of the month.

Ground-water levels, in general, declined slowly in October, November, and the first 3 weeks of December, but rose in the last week of December and the first half of January. Water levels again declined until mid-April when they began a rise that continued through May. New high water-level records that were set in May included those at Allen 6 (records since 1966) and Tippecanoe 4 (records since 1944). From June through the end of the water year, water levels declined. New low water-level records that were set in September, included those at Newton 6 (records since 1967) and Vanderburgh 6 (records since 1965).

Precipitation for water year 1983 was compared to the 30-year period 1951 to 1980. Departure from normal is shown in figure 2. In summary, precipitation was below normal in much of the State and was greatest in the northwestern and southwestern parts of the State. The precipitation deficit in the area around South Bend and east-central Indiana was more than 4 inches for the water year.

Inches of runoff for water year 1983 was compared to the inches of runoff for the 30-year period 1951 to 1980. Departure from normal is shown in figure 3. Below-normal streamflow was recorded in the upper White, Mississinewa and East Fork White River basins. Deficits in these areas were more than 4 inches per square mile less than the 30-average. Releases at reservoirs were able to dampen the effects of low precipitation.


87°
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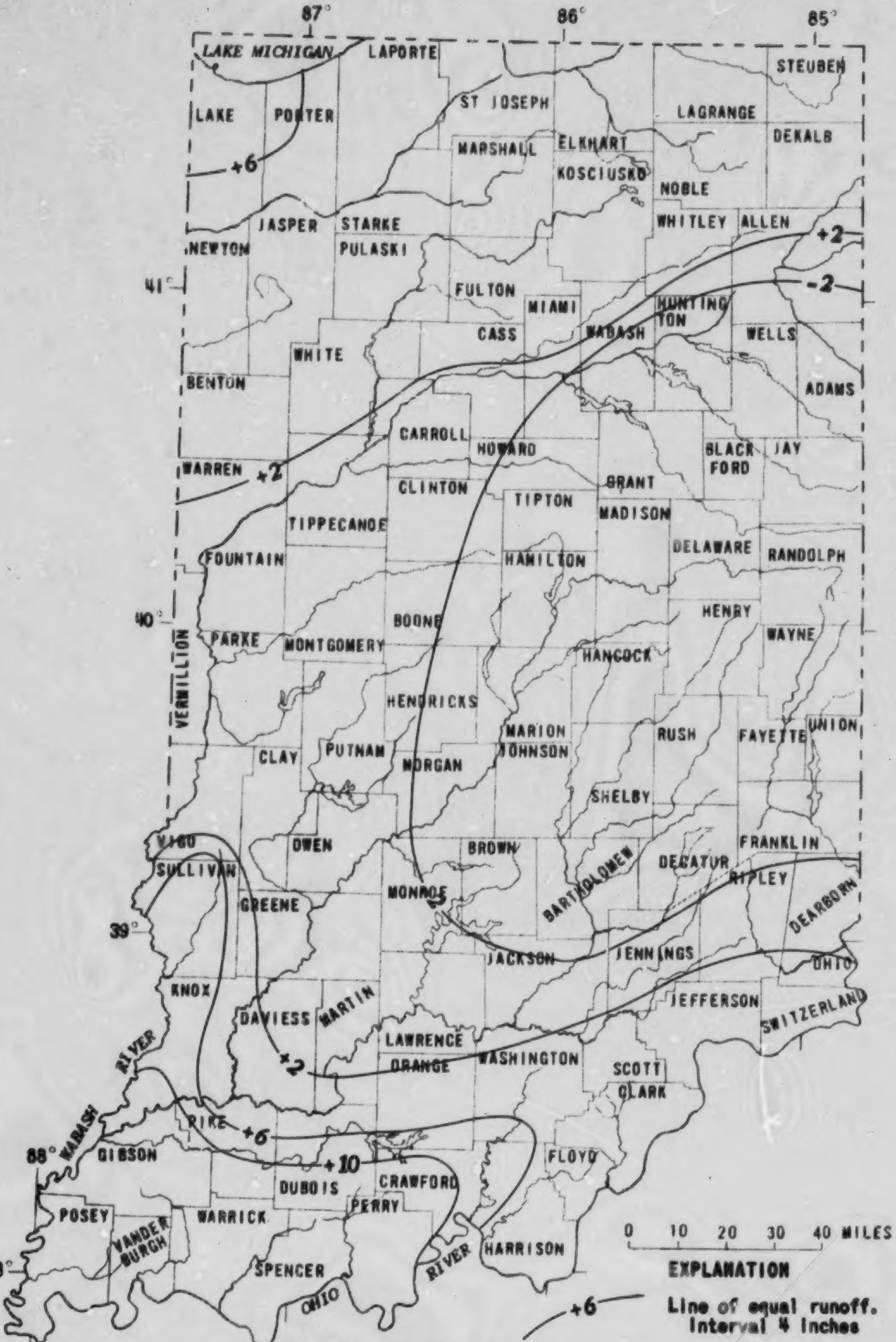
DEKALB
MARSHALL
ELKHART
KOSCIUSKO
NOBLE
JASPER
STARKE
WHITLEY
ALLEN
NEWTON
PULASKI
FULTON
MIAMI
HUNTINGTON
CASS
WABASH
WELLS
WHITE
BENTON
ADAMS
CARROLL
HOWARD
BLACKFORD
JAY
WARREN
CLINTON
GRANT
TIPTON
MADISON
TIPPECANOE
FOUNTAIN
DELAWARE
RANDOLPH
HAMILTON
HENRY
BOONE
WAYNE
PARKE
MONTGOMERY
HANCOCK
VERMILLION
HENDRICKS
MARION
UNION
JOHNSON
RUSH
FAYETTE
CLAY
PUTNAM
MORGAN
SHELBY
VIGO
OWEN
BROWN
FRANKLIN
SULLIVAN
BARTHOLOMEW
DECATUR
RIPLEY
GREENE
MONROE
DEARBORN
JACKSON
JENNINGS
OHIO
KNOX
JEFFERSON
SWITZERLAND
DAVIESS
MARTIN
LAWRENCE
WASHINGTON
SCOTT
ORANGE
CLARK
PIKE
WABASH RIVER
GIBSON
FLOYD
DUBOIS
CRAWFORD
POSEY
WARRICK
PERRY
VANDERBURGH
HARRISON
SPENCER
OHIO RIVER
+10
+6
+2
-2
-2
-2
+2
+6
0 10 20 30 40 MILES
EXPLANATION
+6 Line of equal precipitation. Interval 4 inches

Data from National Oceanic and Atmospheric Administration, 1982-83, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v. 87, nos. 10-12, and v. 88, nos. 1-9.

Figure 2.— Departure of precipitation from normal in Indiana, October 1982 to September 1983.


87°
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LAKE MICHIGAN
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STEUBEN
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LAGRANGE
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PORTER
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MARSHALL
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KOSCIUSKO
NOBLE
+6
JASPER
STARKE
WHITLEY
ALLEN
NEWTON
PULASKI
+2
-2
FULTON
MIAMI
HUNTINGTON
CASS
WABASH
WELLS
WHITE
BENTON
ADAMS
CARROLL
HOWARD
BLACKFORD
JAY
WARREN
+2
GRANT
CLINTON
TIPTON
MADISON
TIPPECANOE
DELAWARE
RANDOLPH
FOUNTAIN
HAMILTON
HENRY
BOONE
WAYNE
PARKE
MONTGOMERY
HANCOCK
VERMILLION
HENDRICKS
MARION
RUSH
FAYETTE
UNION
JOHNSON
CLAY
PUTNAM
MORGAN
SHELBY
VIGO
OWEN
BROWN
FRANKLIN
SULLIVAN
DECATUR
BARTHOLOMEW
RIPLEY
MONROE
-2
GREENE
DEARBORN
JACKSON
JENNINGS
OHIO
KNOX
JEFFERSON
DAVIESS
MARTIN
SWITZERLAND
RIVER
LAWRENCE
+2
ORANGE
WASHINGTON
SCOTT
CLARK
WABASH
PIKE
+6
+10
GIBSON
FLOYD
DUBOIS
CRAWFORD
POSEY
PERRY
VANDERBURGH
WARRICK
RIVER
HARRISON
SPENCER
OHIO
0 10 20 30 40 MILES
EXPLANATION
+6
Line of equal runoff.
Interval 4 inches

Data from U.S. Geological Survey:
Water-Resources Data - Indiana,
Water years 1951-80

Figure 3.— Departure of runoff from normal in Indiana, October 1982 to September 1983.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-one manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Picket Street, Alexandria, VA 22303 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. Water temperature-influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS—TWRI Book 1, Chapter D1. 1975. 65 p.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS—TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. W. Keys and L. M. MacCary: USGS—TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS—TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS—TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS—TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS—TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS-TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS—TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS-TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS-TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr.: USGS-TWRI Book 3, Chapter A12. 1968. 31 pages. Not currently available.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. Introduction to ground-water hydraulics-a programed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for collection and analysis of water samples for dissolved minerals and gases, by Eugene Brown, M. W. Skougstad, and M. J. Fishman: USGS--TWRI Book 5, Chapter A1. 1970. 160 pages.

5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, by K. V. Slack, R. C. Averett, P. E. Greeson, and P. G. Lipscomb: USGS--TWRI Book 5, Chapter A4. 1973. 165 pages.

5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. Finite-difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

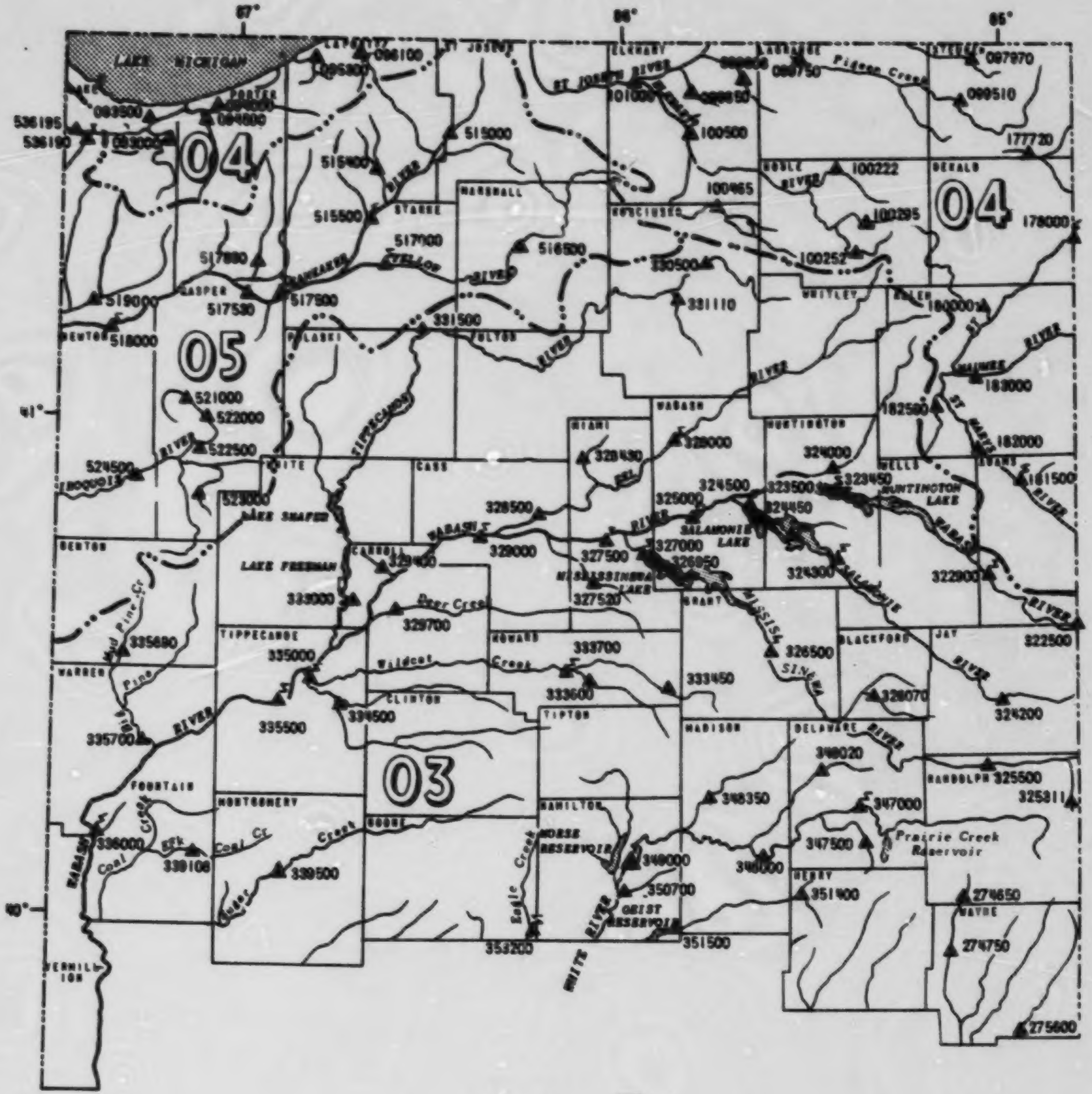
8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

OTHER SELECTED REFERENCES

Rantz, S. E., and others, 1982, Volume 1, Measurement of stage and discharge: U.S. Geological Survey Water-Supply Paper 2175, 284 p.

Rantz, S. E., and others, 1982, Volume 2, Computation of discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.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MARSHALL
STARKE
KOSCIUSKO
NOBLE
DEKALB
WHITLEY
ALLEN
JASPER
NEWTON
PULASKI
FULTON
WABASH
HUNTINGTON
WELLS
ADAMS
MIAMI
CASS
WHITE
CARROLL
BENTON
TIPPECANOE
WARREN
HOWARD
GRANT
BLACKFORD
JAY
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
VERMILLION
ELKHART
LAGRANGE
STEUBEN
LAPORTE
PORTER
LAKE
ST JOSEPH
ST JOSEPH RIVER
Pigeon Creek
EEL RIVER
KANKAKEE RIVER
YELLOW RIVER
IROQUOIS RIVER
TIPPECANOE
LAKE SHAFER
LAKE FREEMAN
WABASH RIVER
SALAMONIE LAKE
MISSISSINEWA LAKE
HUNTINGTON LAKE
ST MARYS RIVER
Deer Creek
Wildcat Creek
Big Pine Cr
Mud Pine Cr
Coal Cr
Sugar Creek
Eagle Creek
MORSE RESERVOIR
GEIST RESERVOIR
WHITE RIVER
Prairie Creek Reservoir

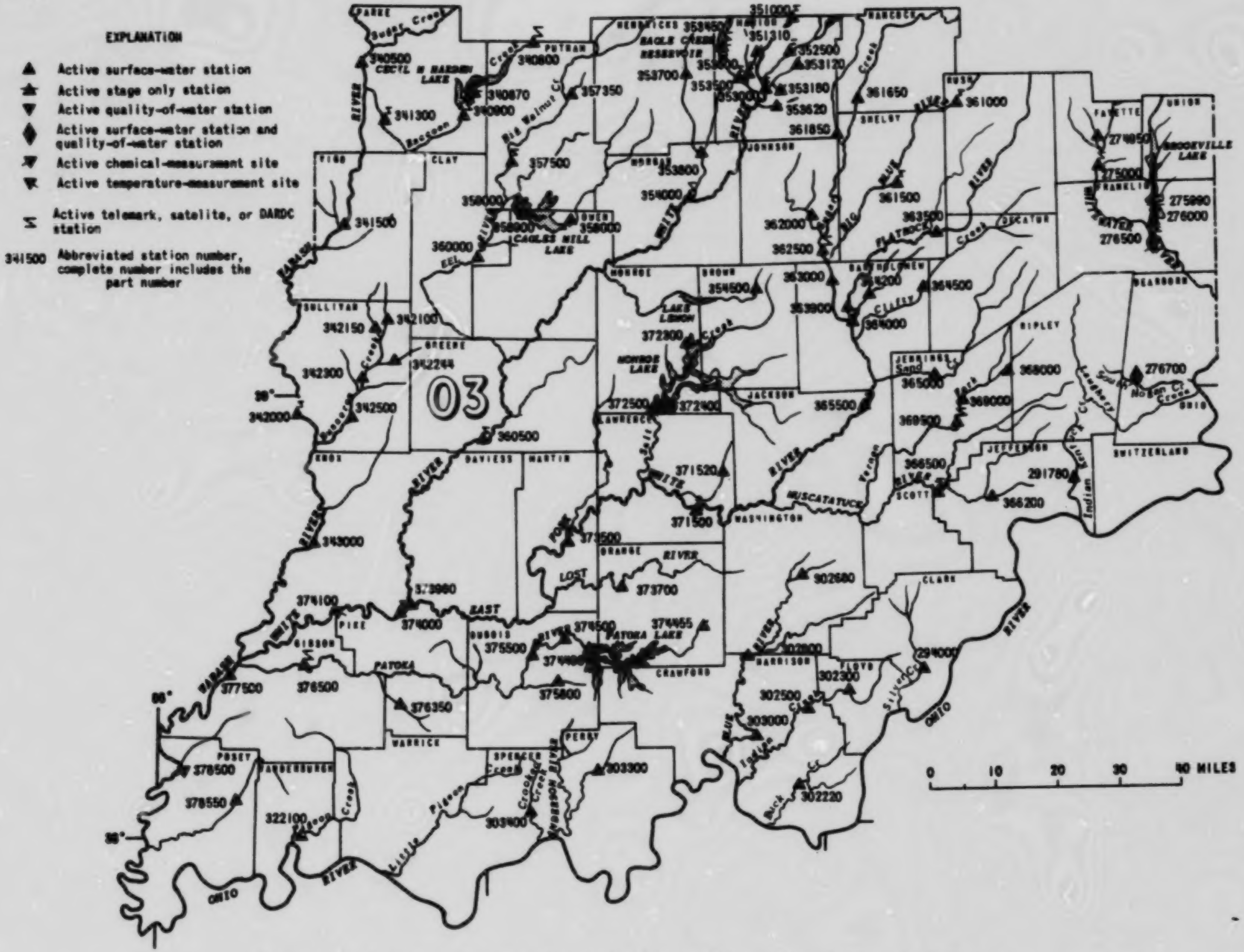
EXPLANATION
▲ Active surface-water station
Active stage only station
▼ Active quality-of-water station
◆ Active surface-water station and quality-of-water station
Active chemical-measurement site
Active temperature-measurement site
Σ Active telemark, satellite, or DARDC station
341500 Abbreviated station number, complete number includes the part number
03
0 10 20 30 40 MILES
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
RUSH
SHELBY
FAYETTE
UNION
CLAY
VIGO
MORGAN
JOHNSON
FRANKLIN
DECATUR
OWEN
MONROE
BROWN
BARTHOLOMEW
SULLIVAN
GREENE
JENNINGS
RIPLEY
DEARBORN
JACKSON
LAWRENCE
KNOX
DAVIESS
MARTIN
JEFFERSON
SWITZERLAND
SCOTT
WASHINGTON
ORANGE
CLARK
PIKE
DUBOIS
GIBSON
CRAWFORD
HARRISON
FLOYD
WARRICK
SPENCER
PERRY
POSEY
VANDERBURGH
CECIL M HARDEN LAKE
EAGLE CREEK RESERVOIR
CAGLES MILL LAKE
BROOKVILLE LAKE
LAKE LEMON
MONROE LAKE
PATOKA LAKE
WABASH RIVER
WHITE RIVER
EEL RIVER
BLUE RIVER
OHIO RIVER
MUSCATATUCK
PATOKA
LOST RIVER
EAST
FLATROCK
WHITEWATER RIVER
Sugar Creek
Raccoon Creek
Big Walnut Cr.
Clifty Creek
Sand Cr.
Laughery Cr.
Hogan Cr.
Indian Kentuck Cr.
Silver Cr.
Indian Cr.
Buck Cr.
Pigeon Creek
Little Pigeon Creek
Crooked Creek
Anderson River
340500
341300
340600
340870
340900
357350
357500
341500
358000
358900
359000
360000
342100
342150
342244
342300
342500
342000
360500
343000
373980
374100
374000
377500
376500
376350
378500
378550
322100
303400
303300
351000
353700
353500
353000
352500
353120
353180
353620
361850
361650
361000
353800
354000
362000
362500
361500
363500
363000
363900
364200
364500
364000
354500
372300
372500
372400
365500
365000
368000
369000
369500
366500
366200
291780
276700
274850
275000
275090
276000
276500
371520
371500
373500
373700
374455
374500
375500
375800
302680
302800
302300
302500
303000
302220
294000
30°
38°
88°
86°

Figure 4.-- Location of stream-flow and water-quality gaging stations in Indiana.

03274650 WHITEWATER RIVER NEAR ECONOMY, IN

LOCATION.--Lat 40°00'05", long 85°06'56", in NW¼NE¼ sec.19, T.18 N., R.13 E., Wayne County, Hydrologic Unit 05080003, on right bank 6 ft downstream from bridge on Wayne County Line Road, 1.7 miles upstream from Little Creek, 2.4 miles northwest of Economy, and at mile 91.9.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--W 1983: 1982.

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 1.0 ft^3/s and poor below.

AVERAGE DISCHARGE.--13 years, 10.8 ft^3/s, 14.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s Aug. 20, 1979, gage height, 8.85 ft; minimum daily discharge, 0.28 ft^3/s Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 14	1200	206	5.12
May 2	0400	*326	*5.88

Minimum daily discharge, 0.42 ft^3/s Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	.56	2.2	8.6	6.0	3.4	4.7	74	3.4	10	1.1	.55
2	.57	.78	1.9	7.5	43	3.4	18	144	3.1	6.6	1.1	.55
3	.57	.62	2.2	6.3	30	3.3	22	74	3.1	3.4	1.0	.54
4	.57	.57	3.4	5.5	14	3.3	14	38	3.1	5.0	1.2	.50
5	.57	.54	4.0	5.0	9.5	3.3	9.7	26	2.9	7.2	1.0	.47
6	.57	.54	3.8	5.0	8.2	3.6	11	20	2.9	3.1	.99	.88
7	.77	.54	2.6	4.8	6.9	3.4	43	19	2.6	2.5	.97	.87
8	.57	.54	2.2	4.0	5.6	3.4	22	39	2.5	2.1	.90	.69
9	.56	.54	1.9	4.0	5.4	3.2	30	18	2.5	1.8	.86	.52
10	.56	.54	1.8	4.3	5.4	3.1	24	13	2.2	1.8	.85	.45
11	.56	.57	1.8	4.3	5.3	3.0	21	11	2.2	1.7	1.3	.44
12	.56	1.0	1.5	3.6	4.6	2.9	15	9.6	2.2	1.7	1.0	.44
13	.56	.80	1.3	3.4	4.4	2.9	17	8.8	2.2	1.5	.86	.43
14	.56	.64	1.4	3.4	4.5	2.9	123	8.6	2.1	1.5	.84	.42
15	.56	.57	2.2	3.4	4.7	2.9	44	8.8	2.1	1.4	.82	.42
16	.56	.57	9.1	3.1	5.5	2.8	28	8.0	2.1	1.3	.81	.54
17	.56	.57	4.5	3.1	5.4	2.9	23	7.2	1.8	1.4	.97	.48
18	.56	.57	3.2	2.8	5.0	3.2	16	6.9	1.8	1.4	.91	.45
19	.56	.50	3.2	2.5	4.8	3.0	12	7.0	9.7	1.5	.84	.45
20	.69	1.2	3.1	2.5	4.4	3.2	9.6	6.3	8.3	1.4	.84	.48
21	.59	2.5	2.5	2.6	4.3	15	8.6	5.8	4.8	1.4	.77	.56
22	.56	1.8	2.2	4.8	4.3	8.9	8.1	7.8	3.1	1.4	.70	.51
23	.56	2.8	3.1	8.3	4.3	6.2	7.6	6.6	2.6	1.5	.74	.49
24	.56	2.8	3.6	8.3	4.0	5.4	7.0	5.0	2.5	2.2	.61	.47
25	.56	1.8	13	6.5	3.7	4.6	6.5	5.0	2.2	1.5	.57	.46
26	.56	1.8	15	5.5	3.4	4.4	5.9	5.0	2.1	1.4	.55	.45
27	.56	1.9	56	4.8	3.3	4.9	6.0	4.3	1.8	1.2	.54	.44
28	.56	5.3	53	4.0	3.4	5.7	7.2	4.0	2.1	1.1	.68	.44
29	.56	3.8	27	4.0	---	5.3	6.3	4.3	2.1	1.1	.59	.44
30	.56	2.6	16	8.0	---	4.7	35	3.6	12	1.1	.57	.44
31	.56	---	11	7.2	---	4.5	---	3.4	---	1.2	.55	---
TOTAL	17.80	39.86	259.7	151.2	213.3	132.7	605.2	602.0	98.1	73.4	26.03	15.27
MEAN	.57	1.33	8.38	4.88	7.62	4.28	20.2	19.4	3.27	2.37	.84	.51
MAX	.77	5.3	56	8.6	43	15	123	144	12	10	1.3	.88
MIN	.56	.50	1.3	2.5	3.3	2.8	4.7	3.4	1.8	1.1	.54	.42
CFSM	.06	.13	.81	.47	.73	.41	1.94	1.87	.31	.23	.08	.05
IN.	.06	.14	.93	.54	.76	.47	2.16	2.15	.35	.26	.09	.05

CAL YR 1982 TOTAL 4192.37 MEAN 11.5 MAX 202 MIN .50 CFSM 1.11 IN 14.99
WTR YR 1983 TOTAL 2234.56 MEAN 6.12 MAX 144 MIN .42 CFSM .59 IN 7.99

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE¼NE¼ sec.3, T.16 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on left bank at downstream side of bridge on Jerry Meyers Road, 1.0 mile upstream from Pronghorn Run, 1.5 miles north of Interstate 70, 2.0 miles downstream from Nettle Creek, 2.6 miles south of Hagerstown, and at mile 84.9.

DRAINAGE AREA.--58.7 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 68 ft³/s, 15.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s Jan. 26, 1976, gage height, 10.89 ft; maximum gage height, 11.24 ft Aug. 1, 1979; minimum daily, 5.3 ft³/s Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	0900	*1230	*8.45

Minimum daily discharge, 7.4 ft³/s Sept. 5, 10-11, 18-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	30	57	40	28	34	484	44	61	19	9.3
2	13	15	28	52	190	28	68	654	43	43	18	9.3
3	13	16	29	48	125	27	90	377	45	36	17	8.2
4	13	14	36	44	68	27	67	198	44	36	20	7.8
5	13	13	39	43	54	26	55	134	40	39	19	7.4
6	13	13	40	41	50	28	62	107	40	33	18	8.2
7	17	14	33	40	48	28	295	108	40	30	16	8.7
8	15	14	30	37	44	28	117	200	38	28	16	8.7
9	15	14	27	36	43	27	182	132	37	27	16	8.7
10	14	13	27	37	40	26	130	90	36	25	15	7.4
11	14	14	26	36	40	26	105	80	35	25	23	7.4
12	14	19	23	34	39	24	85	72	34	23	18	7.8
13	14	17	23	32	36	24	95	67	33	22	16	7.8
14	14	15	22	32	37	24	664	67	32	22	15	7.8
15	14	15	27	31	37	24	222	80	32	21	14	7.8
16	13	15	54	29	37	23	131	69	31	20	14	8.2
17	13	14	43	29	37	23	110	62	31	21	16	7.8
18	14	14	35	26	36	25	93	58	30	21	16	7.4
19	14	14	35	24	36	24	81	59	46	22	14	7.4
20	15	20	34	23	34	26	72	56	44	21	12	7.8
21	14	28	31	25	34	60	67	53	36	19	11	9.8
22	14	24	28	39	34	48	62	73	32	20	11	8.7
23	13	31	29	51	34	40	58	64	31	21	12	8.7
24	13	32	30	50	32	37	55	55	29	23	11	9.3
25	14	24	61	44	31	35	53	54	28	21	11	8.2
26	14	25	78	39	29	33	50	52	26	20	11	9.3
27	14	26	317	36	28	34	49	49	27	19	12	9.3
28	14	47	285	35	28	36	53	48	78	20	10	9.3
29	14	46	129	34	---	36	49	48	44	19	9.8	9.3
30	13	34	82	43	---	34	274	46	113	19	9.8	8.2
31	14	---	66	44	---	33	---	46	---	19	9.8	---
TOTAL	430	614	1777	1171	1321	942	3528	3742	1199	796	450.4	251.0
MEAN	13.9	20.5	57.3	37.8	47.2	30.4	118	121	40.0	25.7	14.5	8.37
MAX	17	47	317	57	190	60	664	654	113	61	23	9.8
MIN	13	13	22	23	28	23	34	46	26	19	9.8	7.4
CFSM	.24	.35	.98	.64	.80	.52	2.01	2.06	.68	.44	.25	.14
IN.	.27	.39	1.13	.74	.84	.60	2.24	2.37	.76	.50	.29	.16

CAL YR 1982 TOTAL 27679.0 MEAN 75.8 MAX 1310 MIN 13 CFSM 1.29 IN 17.54
WTR YR 1983 TOTAL 16221.4 MEAN 44.4 MAX 664 MIN 7.4 CFSM .76 IN 10.28

03274950 LITTLE WILLIAMS CREEK AT CONNERSVILLE, IN

LOCATION.--Lat 39°38'16", long 85°10'20", in SW¼NE¼ sec.27, T.14 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on downstream left bank wingwall of bridge on State Highway 44, 1 mile west of Connersville, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--9.16 mi².

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 842.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 10.5 ft³/s, 15.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,560 ft³/s June 22, 1974, gage height, 10.13 ft; minimum daily, 0.25 ft³/s Sept. 10, 11, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	0400	567	5.42	June 19	2100	*701	*5.28
May 3	0600	430	5.00				

Minimum daily discharge, 0.25 ft³/s Sept. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	1.2	2.4	10	5.1	5.4	6.7	43	5.8	8.2	1.9	.53
2	.94	1.3	2.5	9.1	59	5.4	10	154	5.4	5.4	1.3	.37
3	.95	1.7	3.1	7.9	26	5.1	14	161	6.2	4.3	1.1	.36
4	1.0	1.3	3.6	6.7	13	5.1	10	38	5.8	12	1.5	.34
5	1.1	1.2	3.3	6.0	11	5.1	8.3	24	5.4	7.2	1.4	.32
6	1.1	1.2	3.1	6.0	11	5.4	12	19	5.4	4.3	1.3	.31
7	1.4	1.2	2.7	6.0	9.6	5.4	23	18	5.0	4.0	1.2	.29
8	1.3	1.1	2.4	5.1	8.7	5.4	32	19	4.6	4.0	1.0	.28
9	1.3	1.1	2.3	5.1	8.5	5.1	37	14	4.3	3.7	.97	.26
10	1.2	1.1	2.3	4.8	8.3	4.8	26	13	4.0	3.4	.88	.25
11	1.2	1.3	2.3	4.8	7.9	4.8	19	12	4.0	3.1	13	.25
12	1.2	1.7	2.0	4.5	7.5	4.5	14	11	4.0	2.8	1.5	.28
13	1.2	1.5	2.0	4.3	7.1	4.5	22	10	3.7	2.6	1.1	.28
14	1.1	1.3	2.0	4.0	7.1	4.5	85	11	3.7	2.4	.91	.28
15	1.1	1.2	3.3	4.0	7.1	4.5	36	17	3.7	2.4	.80	.30
16	1.2	1.1	5.7	4.0	6.7	4.3	26	12	3.1	2.2	.75	.40
17	1.2	1.1	3.6	3.6	6.7	4.3	19	10	3.1	2.8	.85	.33
18	1.1	1.1	3.1	3.3	6.4	5.1	15	9.7	2.8	2.2	.97	.31
19	1.1	1.1	3.1	3.0	6.4	4.8	13	9.7	60	2.0	.81	.31
20	1.3	1.4	3.0	3.0	6.0	4.8	11	9.2	19	1.8	.70	.35
21	1.2	3.6	2.8	3.5	5.7	9.6	10	8.7	9.2	1.6	.68	.45
22	1.2	2.4	2.7	18	5.7	6.0	8.7	16	7.2	1.6	.67	.37
23	1.1	2.7	2.7	11	5.7	5.4	7.9	10	5.8	1.6	.73	.37
24	1.1	2.4	2.8	7.5	5.7	5.4	7.5	8.7	5.0	2.2	.69	.40
25	1.1	1.9	39	5.7	5.4	5.1	7.1	8.7	4.6	1.8	.62	.35
26	1.1	2.0	9.1	5.1	5.1	5.1	7.1	7.7	4.3	1.5	.46	.40
27	1.1	2.1	108	4.5	5.4	5.5	6.7	7.2	3.7	1.3	.76	.40
28	1.1	5.7	57	4.3	5.4	5.3	7.1	6.7	5.0	1.3	1.0	.40
29	1.1	3.5	23	4.3	---	4.9	6.7	7.2	12	1.2	.68	.40
30	1.1	2.7	13	5.4	---	4.8	26	6.7	12	1.1	.56	.35
31	1.2	---	12	4.8	---	4.8	---	6.2	---	1.7	.60	---
TOTAL	35.25	54.2	329.9	179.3	273.2	160.2	533.8	708.4	227.8	97.7	41.59	10.29
MEAN	1.14	1.81	10.6	5.78	9.76	5.17	17.8	22.9	7.59	3.15	1.34	.34
MAX	1.4	5.7	108	18	59	9.6	85	161	60	12	13	.53
MIN	.86	1.1	2.0	3.0	5.1	4.3	6.7	6.2	2.8	1.1	.46	.25
CFSM	.12	.20	1.16	.63	1.07	.56	1.94	2.50	.83	.34	.15	.04
IN.	.14	.22	1.34	.73	1.11	.65	2.17	2.88	.93	.40	.17	.04

CAL YR 1982 TOTAL 4339.84 MEAN 11.9 MAX 283 MIN .82 CFSM 1.30 IN 17.62
WTR YR 1983 TOTAL 2651.43 MEAN 7.26 MAX 161 MIN .25 CFSM .79 IN 10.77

03275000 WHITEWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 39°34'46", long 85°09'29", in SW¼SE¼ sec.14, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on right bank at Nulltown, 400 ft upstream from Wilson Creek, 0.4 mile upstream from bridge on County Road 480 South, 2.0 miles northeast of Alpine, 5.1 miles upstream from Bear Creek, and at mile 54.8.

DRAINAGE AREA.--522 mi².

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1936, published as West Fork Whitewater River near Alpine.

REVISED RECORDS.--WSP 1143: 1943-44(M), 1947 (M). WSP 1335: 1929-30, 1932(M), 1938, 1946-47(m), 1949-50. WSP 1505: 1942(P). WSP 1908: 1937(M), 1944, 1949(M), drainage area. WDR IN-79-1: 1975 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 750.19 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 9, 1928, nonrecording gage and Nov. 10, 1928 to Sept. 30, 1982 at site 0.5 mile downstream at same datum.

REMARKS.--Records good except those for November and December, which are fair.

AVERAGE DISCHARGE.--55 years, 551 ft³/s, 14.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft³/s Jan. 14, 1937, gage height, 16.61 ft; minimum daily, 6.0 ft³/s Sept. 8, 9, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
April 30	2200	7320	14.67
May 2	2300	*9270	*15.45

Minimum daily discharge, 61 ft³/s Sept. 18-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	121	300	590	439	254	270	3500	403	505	129	86
2	112	133	280	520	1140	249	333	5850	382	378	117	84
3	109	140	290	470	1600	242	660	5410	392	301	112	81
4	110	130	340	450	926	239	621	2870	407	348	116	79
5	109	125	350	435	665	233	511	1790	372	309	124	78
6	108	120	376	421	591	246	487	1340	360	275	115	79
7	112	120	330	400	528	251	1370	1120	346	234	110	77
8	117	125	280	375	462	244	1410	1490	329	215	107	72
9	115	125	260	356	435	231	1170	1220	315	202	104	74
10	114	113	251	358	415	227	1190	991	300	192	100	72
11	112	118	246	349	395	223	954	889	286	187	242	69
12	112	142	225	332	367	216	814	827	275	179	149	70
13	113	132	211	316	347	210	757	768	269	172	117	70
14	111	127	209	307	349	212	2790	733	259	163	108	66
15	111	122	235	302	349	210	3140	821	252	160	106	62
16	106	120	506	283	344	204	1490	775	249	154	104	64
17	106	115	520	280	343	199	1100	699	239	154	103	64
18	117	114	370	254	340	215	814	639	233	150	108	61
19	119	114	355	235	332	214	710	618	398	148	105	61
20	117	124	340	225	322	211	636	612	421	146	100	63
21	117	211	310	261	310	403	579	567	313	142	95	86
22	115	260	280	502	307	481	540	653	241	135	94	76
23	115	240	270	641	301	374	512	729	214	134	93	72
24	115	290	275	611	291	338	477	609	198	140	92	71
25	117	250	450	529	279	312	450	548	184	144	89	71
26	117	230	1000	462	259	288	445	519	173	137	88	72
27	117	240	2000	415	252	296	423	485	169	128	92	73
28	117	420	3400	380	253	307	413	463	187	123	97	73
29	115	500	1600	362	---	292	401	460	408	119	95	72
30	112	370	1000	390	---	276	1360	440	326	116	90	69
31	119	---	700	469	---	270	---	419	---	124	88	---
TOTAL	3523	5491	17559	12280	12941	8167	26827	38854	8900	6014	3389	2167
MEAN	114	183	566	396	462	263	894	1253	297	194	109	72.2
MAX	119	500	3400	641	1600	481	3140	5850	421	505	242	86
MIN	106	113	209	225	252	199	270	419	169	116	88	61
CFSM	.22	.35	1.08	.76	.89	.50	1.71	2.40	.57	.37	.21	.14
IN.	.25	.39	1.25	.88	.92	.58	1.91	2.77	.63	.43	.24	.15

CAL YR 1982 TOTAL 275321 MEAN 754 MAX 13100 MIN 106 CFSM 1.44 IN 19.62
WTR YR 1983 TOTAL 146112 MEAN 400 MAX 5850 MIN 61 CFSM .77 IN 10.41

03275600 EAST FORK WHITEWATER RIVER AT ABINGTON, IN

LOCATION.--Lat 39°43'57", long 84°57'35", in NE¼SW¼ sec.2, T.12 N., R.2 W., Wayne County, Hydrologic Unit 05080003, at downstream side of center pier of bridge on county road at Abington, 3 miles downstream from Elkhorn Creek, 8 miles southwest of Richmond, and at mile 26.7.

DRAINAGE AREA.--200 mi².

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WSP 2108: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 791.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 230 ft³/s, 15.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s July 20, 1969, gage height, 16.18 ft; minimum daily, 14 ft³/s Sept. 11, 15, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 27	1800	*3600	*10.00

Minimum daily discharge, 14 ft³/s Sept. 11, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	41	156	251	177	95	112	1570	119	210	35	19
2	35	53	133	217	659	93	174	2010	112	114	31	18
3	33	69	124	191	638	91	239	2320	124	83	30	17
4	33	45	124	164	336	90	207	1080	127	85	33	16
5	33	41	138	155	232	88	173	624	109	105	34	16
6	33	39	148	148	211	104	180	434	106	80	32	17
7	39	38	124	144	188	103	272	378	101	63	28	17
8	39	37	107	131	163	102	314	561	95	56	26	16
9	37	37	99	126	154	111	348	396	90	51	25	15
10	36	37	95	129	152	100	399	306	85	47	24	16
11	35	40	97	127	147	96	323	261	80	44	80	14
12	34	65	87	117	137	91	263	230	76	42	37	15
13	34	54	81	109	128	88	259	212	75	40	30	16
14	33	44	79	106	129	88	1070	215	71	38	27	15
15	33	42	124	107	127	85	834	283	68	36	26	14
16	33	41	427	100	125	82	435	223	67	35	26	17
17	32	40	259	99	124	80	335	187	64	34	26	17
18	32	40	180	89	121	89	271	172	63	41	28	15
19	32	40	170	85	118	89	229	180	82	38	25	15
20	35	58	168	80	114	93	197	168	71	35	24	20
21	34	215	142	98	112	295	177	156	63	33	22	74
22	33	187	124	290	110	222	165	301	57	31	21	28
23	33	172	120	403	110	158	158	249	54	42	22	23
24	33	182	129	317	105	137	152	184	52	104	21	22
25	33	115	439	241	103	123	136	165	50	46	20	21
26	33	113	816	197	96	114	128	154	46	40	20	21
27	33	125	2160	170	95	127	123	139	45	35	20	21
28	33	398	1550	151	96	135	128	135	108	33	20	21
29	32	370	691	142	---	119	124	141	138	31	21	20
30	32	210	416	184	---	111	197	136	222	30	20	20
31	36	---	309	201	---	109	---	126	---	31	20	---
TOTAL	1053	2988	9816	5069	5007	3508	8122	13696	2620	1733	854	596
MEAN	34.0	99.6	317	164	179	113	271	442	87.3	55.9	27.5	19.9
MAX	39	398	2160	403	659	295	1070	2320	222	210	80	74
MIN	32	37	79	80	95	80	112	126	45	30	20	14
CFSM	.17	.50	1.59	.82	.90	.57	1.36	2.21	.44	.28	.14	.10
IN.	.20	.56	1.83	.94	.93	.65	1.51	2.55	.49	.32	.16	.11

CAL YR 1982 TOTAL 98378 MEAN 270 MAX 5480 MIN 32 CFSM 1.35 IN 18.30
WTR YR 1983 TOTAL 55062 MEAN 151 MAX 2320 MIN 14 CFSM .76 IN 10.24

03275990 BROOKVILLE LAKE AT BROOKVILLE, IN

LOCATION.--Lat 39°26'27", long 85°00'10', in NE¼SE¼ sec.17, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, in discharge tower of reservoir on East Fork Whitewater River, 1.4 miles northeast of Brookville, and 2.2 miles above mouth.

DRAINAGE AREA.--379 mi².

PERIOD OF RECORD.--January 1974 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by two gates, 5.25 ft wide and 12 ft high, in circular conduit through dam. Minimum design capacity is 55,600 acre-ft elevation, 713 ft. Seasonal pool capacity is 184,000 acre-ft, elevation, 748 ft. Capacity at uncontrolled spillway is 359,600 acre-ft, elevation, 775 ft. Reservoir is used for flood control and recreation. Reservoir was put in operation on January 22, 1974.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 225,650 acre-ft May 4, 1983, elevation, 755.43 ft; minimum, 127,370 acre-ft Feb. 3, 1976, elevation, 735.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 225,650 acre-ft May 4, elevation, 755.43 ft; minimum, 144,770 acre-ft Feb. 1, elevation, 739.96 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	748.35	185,870	
Oct. 31	744.58	166,580	-19,290
Nov. 30	740.13	145,540	-21,040
Dec. 31	741.67	152,610	+7,070
CAL YR 1982			+7,210
Jan. 31	740.03	145,080	-7,530
Feb. 28	740.09	145,350	+270
Mar. 31	741.50	151,820	+6,470
Apr. 30	748.45	186,400	+34,580
May 31	747.95	183,750	-2,650
June 30	748.40	186,130	+2,380
July 31	748.32	185,710	-420
Aug. 31	747.94	183,700	-2,010
Sept. 30	747.12	179,420	-4,280
WTR YR 1983			-6,450

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE¼NE¼ sec.20, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank 100 ft upstream from bridge on State Highway 101, at Brookville, 0.4 mile downstream from Brookville Lake, and 1.8 miles upstream from mouth.

DRAINAGE AREA.--380 mi^2.

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WSP 1555: 1954(M), 1955(P). WSP 1908: 1955, drainage area.

GAGE.--None. Datum of gage was 621.76 ft National Geodetic Vertical Datum of 1929. Prior to May 22, 1954, nonrecording gage at site 100 ft downstream at datum 2.00 ft higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft downstream at datum 2.00 ft higher. Aug. 21, 1965 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--29 years, 392 ft^3/s, 14.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft^3/s Jan. 21, 1959; maximum gage height, 17.35 ft May 24, 1968; no flow, July 27, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,360 ft^3/s May 12; minimum daily, 12 ft^3/s Dec. 14, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	1010	193	2010	484	370	41	390	105	97	57	42
2	42	1010	18	2010	371	370	41	395	57	97	57	42
3	42	313	21	2000	786	258	41	399	57	97	57	42
4	42	82	22	758	993	191	41	1480	57	97	57	42
5	42	502	24	370	992	191	41	2130	57	97	57	42
6	42	1010	327	370	991	191	41	2130	57	97	57	42
7	42	1000	308	185	603	191	41	2130	57	97	57	42
8	42	1000	14	278	370	191	41	2120	57	97	57	42
9	42	486	13	370	370	191	41	2120	57	97	57	42
10	42	486	13	370	370	191	41	3450	57	97	57	42
11	42	485	14	370	421	191	41	3990	57	71	57	42
12	42	485	14	370	434	191	41	4360	57	57	57	42
13	42	485	13	370	370	191	41	3070	57	57	57	42
14	42	484	12	370	370	136	41	1530	57	57	57	42
15	42	484	14	278	370	41	42	1530	153	57	57	42
16	42	484	286	247	370	41	42	1530	200	57	57	42
17	338	483	481	247	370	41	42	1050	200	57	57	42
18	490	483	481	247	370	41	42	387	200	57	57	42
19	490	482	481	247	370	41	42	387	200	57	57	42
20	647	482	480	247	370	41	42	387	325	57	57	42
21	758	866	480	247	251	41	42	387	387	57	57	42
22	757	995	128	304	325	41	246	387	387	57	57	42
23	756	994	12	733	236	41	586	387	387	57	57	42
24	755	993	15	992	191	41	586	387	387	57	57	42
25	755	779	19	991	191	41	212	387	262	57	57	42
26	754	480	370	990	191	41	42	872	200	57	47	155
27	753	480	1110	525	191	41	42	1030	200	57	42	228
28	752	480	1490	370	303	41	42	1030	131	57	42	228
29	925	480	1820	370	---	41	70	574	97	57	42	228
30	1010	480	2020	622	---	41	384	386	97	57	42	228
31	1010	---	2010	735	---	41	---	262	---	57	42	---
TOTAL	11622	18763	12703	18593	12024	3741	3178	41054	4659	2181	1682	2117
MEAN	375	625	410	600	429	121	106	1324	155	70.4	54.3	70.6
MAX	1010	1010	2020	2010	993	370	586	4360	387	97	57	228
MIN	42	82	12	185	191	41	41	262	57	57	42	42
CFSM	.99	1.65	1.08	1.58	1.13	.32	.28	3.48	.41	.19	.14	.19
IN.	1.14	1.84	1.24	1.82	1.18	.37	.31	4.02	.46	.21	.16	.21

CAL YR 1982 TOTAL 207154.00 MEAN 568 MAX 3440 MIN .00 CFSM 1.50 IN 20.28
WTR YR 1983 TOTAL 132317.00 MEAN 363 MAX 4360 MIN 12 CFSM .96 IN 12.95

03276500 WHITEWATER RIVER AT BROOKVILLE, IN
(National stream-quality accounting network station)

LOCATION.--Lat 39°24'24", long 85°00'46", in NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank at downstream side of highway bridge, 0.3 mile downstream from East Fork Whitewater River, 1.1 miles south of Brookville, and at mile 29.3.

DRAINAGE AREA.--1,224 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(m), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft National Geodetic Vertical Datum of 1929. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

AVERAGE DISCHARGE.--62 years (water years 1916-17, 1924 to current year), 1,273 ft³/s, 14.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft³/s Jan. 21, 1959, gage height, 27.78 ft, from rating curve extended above 45,000 ft³/s on basis of contracted-opening measure-ment of peak flow; minimum daily, 60 ft³/s July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913, reached a stage of 39.0 ft, at present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,800 ft³/s May 1, gage height, 16.61 ft from high-water mark; minimum daily, 115 ft³/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	1010	754	2600	1060	600	478	18100	626	635	221	157
2	194	574	593	2460	2540	593	610	15000	561	594	213	152
3	189	252	580	2070	3020	548	998	16000	626	495	208	150
4	189	252	635	1260	2390	507	991	7440	840	602	205	145
5	184	500	672	860	1940	500	844	5290	609	953	210	138
6	184	965	870	831	1850	514	818	4270	554	534	209	137
7	179	965	860	802	1370	548	1250	3760	528	455	204	142
8	179	860	580	763	948	528	3410	4170	472	418	199	135
9	179	580	521	717	914	514	2570	4050	458	394	190	135
10	179	580	493	708	880	500	2080	4760	439	375	190	132
11	179	587	479	699	948	500	1680	5040	426	349	272	129
12	179	593	458	672	975	486	1360	4880	413	291	403	133
13	179	600	426	644	802	479	1230	3550	393	289	295	119
14	175	600	419	567	792	458	3760	2510	387	280	238	122
15	175	593	452	574	763	400	4280	3350	413	271	226	118
16	175	600	1360	541	754	393	2270	3070	439	265	215	121
17	406	600	1250	541	745	387	1700	2170	426	258	214	118
18	626	600	1070	500	726	393	1390	1260	419	257	212	118
19	626	600	996	472	717	413	1180	1190	419	263	211	120
20	708	609	1010	458	699	406	1020	1140	1260	327	206	115
21	792	699	948	472	635	897	921	1050	681	270	201	141
22	792	1280	717	1500	574	840	1010	1140	574	253	199	151
23	782	1230	580	2170	574	680	1290	1250	492	242	194	145
24	782	1280	609	2030	567	596	1250	1070	532	240	190	137
25	782	1050	939	1800	548	554	898	975	515	242	188	133
26	782	754	2610	1440	535	521	644	1360	438	237	173	201
27	782	745	6400	888	514	512	613	1660	390	232	161	255
28	782	1220	5840	831	561	546	601	1620	391	226	175	255
29	897	1290	4000	782	---	522	659	1160	1200	221	188	259
30	1010	1050	3190	986	---	498	1790	897	618	216	173	248
31	1010	---	2780	1360	---	483	---	763	---	214	166	---
TOTAL	14471	23118	43091	32998	29341	16316	43595	123945	16539	10898	6549	4561
MEAN	467	771	1390	1064	1048	526	1453	3998	551	352	211	152
MAX	1010	1290	6400	2600	3020	897	4280	18100	1260	953	403	259
MIN	175	252	419	458	514	387	478	763	387	214	161	115
CFSM	.38	.63	1.14	.87	.86	.43	1.19	3.27	.45	.29	.17	.12
IN.	.44	.70	1.31	1.00	.89	.50	1.32	3.77	.50	.33	.20	.14

CAL YR 1982 TOTAL 592013 MEAN 1622 MAX 23800 MIN 175 CFSM 1.33 IN 17.99
WTR YR 1983 TOTAL 365422 MEAN 1001 MAX 18100 MIN 115 CFSM .82 IN 11.11

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981 (discontinued).
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1981 (discontinued).
SEDIMENT DISCHARGE: October 1974 to current year (Partial-record station).

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos Feb. 9, 19, 1980, July 27, 1981; minimum, 95 micromhos Nov. 25, 1978.
WATER TEMPERATURE: Maximum, 28.0°C July 31, Aug. 21, 1975; minimum, 0.0°C on many days during 1976-77 winter periods, Feb. 8, 1979, Jan. 9-11, Feb 4, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 630 micromhos July 27 minimum, 200 micromhos July 5.
WATER TEMPERATURE: Maximum, 24.0°C July 9-12, 14; minimum, 0.0°C Jan. 9-11, Feb. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV 16...	1100	596	434	7.8	5.7	10.5	1.4	13.5	777	5500	560	220
FEB 08...	1630	912	532	8.1	1.8	3.7	1.9	15.7	869	700	640	270
MAY 04...	1100	7880	435	7.8	--	11.6	100	10.9	761	4800	K26400	220
SEP 06...	1140	137	541	7.7	29.5	23.8	5.6	9.0	764	2900	460	270

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 16...	53	51	23	10	9	.3	2.4	170	38	17	.20	1.3
FEB 08...	56	68	25	10	7	.3	2.2	217	44	21	.20	4.6
MAY 04...	51	55	20	7.2	7	.2	2.6	169	36	16	.20	6.1
SEP 06...	56	67	26	13	9	.4	2.6	219	48	24	.30	5.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 16...	261	245	.36	420	1.3	.120	.15	.50	.020	.06	.010	<.010
FEB 08...	366	306	.50	901	3.3	.050	.06	.60	.040	.12	.050	.040
MAY 04...	305	246	.41	--	3.0	.070	.09	1.10	.310	.95	.060	.030
SEP 06...	391	318	.53	145	<.10	<.010	--	1.20	.050	.15	.020	<.010

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV 16...	--	20	2	56	<1	<1	--	<3	--	<3	--
FEB 08...	.12	<10	1	67	<1	<1	<1	<3	7	11	2
MAY 04...	.09	250	1	56	<1	<1	2	<3	2	410	3
SEP 06...	--	20	2	80	<.5	<1	<1	<3	4	6	1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 16...	<4	9	.1	<10	--	<1	<1	230	<6.0	6	--
FEB 08...	<4	7	.7	20	4	<1	<1	280	<6.0	<4	108
MAY 04...	<4	49	<.1	20	4	<1	<1	190	<6.0	<3	--
SEP C6...	<4	7	.5	<10	10	<1	<1	250	<6.0	15	--

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN
(Hydrologic bench-mark station)

LOCATION.--Lat 39°01'47", long 85°02'17", in SW¼NW¼ sec.7, T.4 N., R.2 W., Dearborn County, Hydrologic Unit 05090203, on left downstream abutment of bridge on county road at Dillsboro Station, 1.2 miles north-east of Dillsboro, and 1.5 miles downstream from Whitaker Creek.

DRAINAGE AREA.--38.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to current year. Occasional low-flow measurements, water year 1960.

REVISED RECORDS.--WDR IN-72-1: Drainage area. W 1983: 1982.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 571.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those below 1 ft³/s, which are poor.

AVERAGE DISCHARGE.--22 years, 42.3 ft³/s, 15.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s Apr. 29, 1970, maximum gage height, 12.7 ft, from floodmarks Apr. 29, 1970 and from crest-stage gage June 10, 1981; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 14.00 ft, discharge, 16,300 ft³/s, on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	1015	3130	6.76	May 3	0515	*3920	*7.48
May 2	0715	2940	6.57	May 15	0645	2560	6.17

Minimum daily discharge, no flow Aug. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.20	18	27	22	8.8	13	1360	19	2.4	.10	7.1
2	.09	.24	30	24	419	8.4	30	1160	17	1.6	.09	3.1
3	.08	.70	22	20	94	7.9	51	1620	124	1.0	.08	1.7
4	.08	.82	16	18	38	7.9	29	284	116	1.6	.08	1.0
5	.07	.37	18	17	29	7.9	26	101	45	8.4	.07	.56
6	.06	.33	35	15	28	11	51	60	30	4.1	.06	.27
7	.07	.32	19	13	27	16	112	49	24	2.4	.06	.17
8	.07	.31	13	11	17	12	803	71	19	1.6	.05	.12
9	.09	.29	11	9.8	23	12	339	44	15	1.0	.05	.10
10	.12	.28	9.3	9.8	22	11	147	34	12	.60	.04	.09
11	.15	.33	8.8	9.8	29	11	108	29	9.3	.38	.07	.38
12	.12	2.1	8.8	9.3	22	10	68	26	8.4	.28	.08	.25
13	.12	2.6	7.5	7.9	22	9.3	114	24	7.2	.17	.07	.10
14	.10	2.4	6.8	7.9	21	8.8	491	415	6.5	.15	.06	.09
15	.10	1.4	132	7.5	23	8.8	134	1320	6.5	.12	.06	.08
16	.10	1.3	193	7.0	27	7.9	75	218	6.3	.12	.05	.08
17	.09	1.3	52	6.8	24	7.9	54	78	23	.12	.03	.08
18	.09	.94	32	6.0	20	8.4	44	51	54	.24	.02	.08
19	.09	.82	86	5.5	17	8.8	34	49	14	1.0	.01	.07
20	.09	1.4	60	5.0	16	11	30	42	9.3	2.3	.00	.07
21	.09	51	34	6.8	14	56	26	33	7.2	1.7	.00	.07
22	.17	71	21	296	14	27	24	147	5.2	.81	.00	.07
23	.28	32	149	132	14	21	23	71	2.3	.44	.03	.06
24	.26	40	152	66	13	20	22	42	1.9	.60	.05	.06
25	.23	17	495	42	12	16	19	33	1.6	.38	.03	.06
26	.21	9.3	212	32	10	14	18	28	1.3	.44	.02	.06
27	.21	11	865	26	9.3	16	17	23	.94	.33	.15	.06
28	.20	180	244	20	9.3	14	17	22	1.0	.19	.12	.05
29	.18	52	81	18	---	13	18	41	1.9	.14	.60	.05
30	.17	23	46	22	---	13	528	43	3.7	.11	1.8	.05
31	.17	---	34	27	---	12	---	25	---	.10	2.2	---
TOTAL	4.04	504.75	3111.2	925.1	1035.6	416.8	3465	7543	592.54	34.82	6.13	16.08
MEAN	.13	16.8	100	29.8	37.0	13.4	116	243	19.8	1.12	.20	.54
MAX	.28	180	865	296	419	56	803	1620	124	8.4	2.2	7.1
MIN	.06	.20	6.8	5.0	9.3	7.9	13	22	.94	.10	.00	.05
CFSM	.003	.44	2.63	.78	.97	.35	3.05	6.38	.52	.03	.005	.01
IN.	.00	.49	3.04	.90	1.01	.41	3.38	7.36	.58	.03	.01	.02

CAL YR 1982 TOTAL 17841.23 MEAN 48.9 MAX 2020 MIN .03 CFSM 1.28 IN 17.42
WTR YR 1983 TOTAL 17655.06 MEAN 48.4 MAX 1620 MIN .00 CFSM 1.27 IN 17.24

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1968 to current year.
SEDIMENT DISCHARGE: August 1969 to current (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 15...	1700	1.3	632	8.6	0.3	4.8	1.3	14.3	782	K50	240
FEB 07...	1605	27	454	8.5	-2.6	1.4	4.9	14.7	876	K160	380
MAY 03...	1900	1210	209	7.7	11.9	13.6	140	10.6	759	K9600	K23600
SEP 06...	1540	.20	483	7.8	29.0	27.4	4.3	7.4	764	K27000	620

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 15...	260	92	80	15	39	24	1.1	4.9	170	92	51
FEB 07...	220	55	68	12	11	10	.3	2.2	165	60	15
MAY 03...	89	10	29	3.9	4.2	9	.2	2.3	79	29	6.3
SEP 06...	200	70	62	11	25	21	.8	3.4	131	76	34

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV 15...	.20	3.4	409	388	.56	1.39	.10	.020	.03	.20	.050
FEB 07...	.20	6.0	284	274	.39	20.7	2.2	.040	.05	<.10	.050
MAY 03...	.20	9.3	176	133	.24	--	.60	.050	.06	.90	.590
SEP 06...	.30	5.1	311	296	.42	.17	--	--	--	--	--

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)
NOV 15...	.15	.040	.030	.09	--	--	--	--	--	--	--
FEB 07...	.15	.050	.040	.12	--	--	--	--	--	--	--
MAY 03...	1.8	.100	.040	.12	130	1	36	<1	<1	1	<3
SEP 06...	--	--	--	--	20	2	58	<.5	<1	<1	<3

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	--	--	--	--	--	--	--	--
MAY 03...	7	550	3	<4	11	1.5	<10	2	<1	79	6.0
SEP 06...	2	<3	<1	<4	14	.5	<10	2	<1	230	<6.0

DATE	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	--	--	--	--	--	--	15	1.1
MAY 03...	6	--	--	--	--	--	--	--	--	312	1020
SEP 06...	<3	<8.2	<.4	6.1	<.4	5.8	<.4	.07	.30	147	0.1

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 38°52'41", long 85°15'26", in SW¼NW¼ sec.13, T.5 N., R.11 E., Jefferson County, Hydrologic Unit 05140101, on downstream end of left pier of bridge on State Highway 62, 1,500 ft upstream from Wilson Fork, 2.0 miles northeast of Canaan, and at mile 16.7.

DRAINAGE AREA.--27.5 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 590 ft, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 34.3 ft³/s, 16.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,240 ft³/s June 10, 1981, maximum gage height, 11.27 ft Aug. 1, 1979; no flow for many days in 1970, 1972, 1975, and 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,400 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1815	1620	6.48	May 3	0600	3820	8.64
Apr. 8	0930	1530	6.35	May 14	1900	3510	8.39
May 1	1000	2930	7.90	May 15	0800	3290	8.21
May 2	1700	*5310	*9.69	June 28	0530	1730	6.67

Minimum daily discharge, no flow Aug. 10-22, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.62	39	24	14	9.0	9.2	943	13	12	.30	6.1
2	.16	.70	61	19	382	8.1	27	960	10	7.5	.19	1.2
3	.14	1.0	30	16	99	7.6	34	1120	179	5.3	.13	.65
4	.13	.85	22	12	45	7.6	26	248	87	4.6	.10	.39
5	.11	.75	38	11	32	7.2	22	91	32	4.2	.08	.22
6	.09	.68	35	10	27	18	87	53	22	2.9	.06	.14
7	.20	.63	19	9.5	22	16	161	48	16	2.3	.05	.10
8	.22	.61	16	7.6	17	13	579	81	12	1.9	.03	.06
9	1.3	.60	14	6.8	18	11	251	37	10	1.6	.02	.03
10	5.5	.60	12	6.8	23	9.5	127	28	8.0	1.4	.00	.02
11	2.3	.60	12	6.4	25	9.0	86	23	6.7	1.3	.00	.76
12	1.5	20	9.0	5.3	22	8.1	53	33	5.7	1.1	.00	4.0
13	1.0	13	6.8	4.7	20	8.1	87	43	5.0	.91	.00	1.1
14	.80	4.4	6.8	4.4	21	7.6	342	516	4.2	.72	.00	.50
15	.71	2.1	249	4.7	27	7.6	113	946	3.8	.58	.00	.23
16	.63	1.7	200	3.3	27	7.2	57	185	3.8	.49	.00	.20
17	.59	1.5	60	2.8	22	7.2	40	77	3.5	1.4	.00	.15
18	.59	1.4	37	2.4	18	8.1	29	48	3.1	3.3	.00	.09
19	.56	1.3	98	1.9	18	8.1	22	56	3.1	97	.00	.05
20	.75	4.1	54	1.7	16	8.5	17	39	54	46	.00	.03
21	.77	172	32	6.0	15	41	14	29	13	7.0	.00	.09
22	.67	116	23	297	14	22	12	121	4.8	3.7	.00	.04
23	.62	123	151	112	14	17	11	49	3.2	2.5	1.9	.02
24	.60	66	133	53	13	15	12	29	2.3	2.0	.92	.02
25	.60	23	410	32	12	13	9.0	24	1.8	1.6	.35	.02
26	.59	18	176	23	9.0	12	7.6	19	1.5	1.3	.15	.02
27	.58	44	649	19	8.5	13	6.8	15	1.3	1.1	.63	.02
28	.56	309	196	15	9.0	13	7.6	15	5.1	.85	32	.01
29	.56	81	77	14	---	10	7.6	48	284	.69	2.6	.01
30	.58	38	46	19	---	9.5	599	28	28	.50	.97	.00
31	.60	---	33	16	---	9.5	---	16	---	.38	4.1	---
TOTAL	24.20	1047.14	2944.6	766.3	989.5	361.5	2855.8	5968	826.9	218.12	44.58	16.27
MEAN	.78	34.9	95.0	24.7	35.3	11.7	95.2	193	27.6	7.04	1.44	.54
MAX	5.5	309	649	297	382	41	599	1120	284	97	32	6.1
MIN	.09	.60	6.8	1.7	8.5	7.2	6.8	15	1.3	.38	.00	.00
CFSM	.03	1.27	3.46	.90	1.28	.43	3.46	7.02	1.00	.26	.05	.02
IN.	.03	1.42	3.98	1.04	1.34	.49	3.86	8.07	1.12	.30	.06	.02

CAL YR 1982 TOTAL 18050.61 MEAN 49.5 MAX 1540 MIN .04 CFSM 1.80 IN 24.42
WTR YR 1983 TOTAL 16062.91 MEAN 44.0 MAX 1120 MIN .00 CFSM 1.60 IN 21.73

03294000 SILVER CREEK NEAR SELLERSBURG, IN

LOCATION.--Lat 38°22'15", long 85°43'35", in SW¼SW¼ lot 68, Clark Military Grant, Clark County, Hydrologic Unit 05150101, on upstream side of Straws Mill bridge on Watson Road, 0.3 mile downstream from Pleasant Run, 2.4 miles southeast of Sellersburg, and 12.2 miles upstream from mouth.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1705: 1955-58. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 429.78 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records fair except those for July thru September, which are poor. Some regulation by Deam Lake.

AVERAGE DISCHARGE.--29 years, 224 ft³/s, 16.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s Jan. 22, 1959, gage height, 30.89 ft, from floodmarks, from rating curve extended above 6,300 ft³/s on basis of contracted-opening measurements of peak flow, at site 5.2 miles upstream, drainage area, 165 mi², adjusted to gage site; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	unknown	6450	22.40	Apr. 9	0200	3130	16.50
Dec. 28	unknown	3500	17.48	May 2	0800	*9940	*25.76

Minimum daily discharge, 1.0 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	9.0	356	321	195	54	101	6400	88	13	12	5.2
2	5.4	9.4	343	260	1360	52	251	9140	73	11	11	7.0
3	4.5	17	272	245	923	48	513	7070	104	13	7.5	5.0
4	4.3	13	220	260	469	46	314	5130	243	17	5.0	4.0
5	4.9	13	268	198	323	44	236	1470	123	43	4.0	3.5
6	5.6	13	452	171	298	175	276	685	85	15	3.5	3.3
7	5.2	10	260	154	266	262	533	465	67	11	3.1	3.1
8	5.2	8.4	216	126	202	162	1860	366	56	7.6	2.7	2.6
9	205	7.7	180	117	204	129	2690	387	47	6.3	2.5	2.6
10	327	7.7	156	111	213	107	1280	347	38	5.7	2.3	2.4
11	104	7.4	146	103	218	92	775	268	33	5.6	2.2	2.7
12	62	12	136	92	209	80	528	198	28	5.2	2.0	9.5
13	44	55	108	76	179	71	550	215	23	5.0	1.9	7.5
14	34	32	101	73	162	67	1360	407	20	4.7	1.8	4.5
15	28	20	667	68	156	64	878	2080	18	4.5	1.8	2.8
16	24	20	1850	62	146	58	511	1390	22	4.5	1.8	2.6
17	20	19	581	60	138	52	391	564	25	4.3	1.9	2.3
18	18	18	364	55	125	60	319	389	128	4.2	1.9	2.0
19	19	17	329	44	117	76	264	664	36	3.9	2.0	1.8
20	19	99	282	39	104	66	226	794	280	3.7	2.1	1.6
21	27	1500	249	132	93	383	193	423	111	3.5	3.4	2.2
22	26	1020	186	1770	89	245	171	1010	60	3.7	5.2	2.1
23	20	409	183	1140	89	148	160	911	45	3.6	15	1.8
24	14	805	397	672	82	120	188	415	32	3.4	12	1.6
25	13	290	1160	461	73	103	171	296	24	3.1	9.0	1.5
26	13	216	5260	360	64	99	142	236	19	2.9	6.8	1.4
27	13	773	3300	290	56	145	128	188	15	2.9	5.3	1.3
28	12	2000	2680	242	54	178	120	157	14	2.8	5.6	1.2
29	11	1350	762	215	---	129	218	148	18	3.1	5.2	1.1
30	10	457	504	249	---	110	1980	131	16	2.9	5.5	1.0
31	9.4	---	431	226	---	105	---	103	---	2.8	4.6	---
TOTAL	1114.2	9227.6	22399	8392	6607	3530	17327	42447	1891	222.9	150.6	91.2
MEAN	35.9	308	723	271	236	114	578	1369	63.0	7.19	4.86	3.04
MAX	327	2000	5260	1770	1360	383	2690	9140	280	43	15	9.5
MIN	4.3	7.4	101	39	54	44	101	103	14	2.8	1.8	1.0
CFSM	.19	1.63	3.83	1.43	1.25	.60	3.06	7.24	.33	.04	.03	.02
IN.	.22	1.82	4.41	1.65	1.30	.69	3.41	8.35	.37	.04	.03	.02

CAL YR 1982 TOTAL 106146.2 MEAN 291 MAX 5780 MIN 3.7 CFSM 1.54 IN 20.89
WTR YR 1983 TOTAL 113399.5 MEAN 311 MAX 9140 MIN 1.0 CFSM 1.65 IN 22.32

03302220 BUCK CREEK NEAR NEW MIDDLETOWN, IN

LOCATION.--Lat 38°07'13", long 86°05'16", in SE¼NE¼ sec.32, T.4 S., R.4 E., Harrison County, Hydrologic Unit 05140104, at downstream end of pier of bridge on State Highway 337, 0.6 mile downstream from South Fork Buck Creek, 3.6 miles southwest of New Middletown, and 14.4 miles upstream from mouth.

DRAINAGE AREA.--65.2 mi², of which 28.1 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for October and September, which are poor.

AVERAGE DISCHARGE.--14 years, 83.1 ft³/s, 17.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s Apr. 2, 1970, gage height, 14.40 ft; minimum daily, 0.90 ft³/s Sept. 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,600 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1815	4270	9.37	May 13	1045	2200	7.09
Apr. 30	0945	7880	11.39	May 14	0500	2770	7.89
May 1	1145	*11800	*13.98	May 15	0800	5350	10.24
May 3	0700	6610	11.13	June 3	1115	2030	6.83

Minimum daily discharge, 1.4 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.0	108	122	74	28	44	3970	41	19	7.4	6.6
2	4.0	4.0	82	106	405	27	61	1080	37	16	6.6	8.0
3	3.6	5.6	69	92	269	26	90	2690	588	16	5.6	6.0
4	3.3	4.8	60	83	172	25	86	763	278	20	5.3	5.0
5	3.1	4.4	64	77	131	25	60	467	138	35	28	4.0
6	2.9	3.8	73	69	117	87	74	340	79	22	20	4.7
7	3.5	3.6	55	44	97	65	72	279	62	17	8.0	3.8
8	3.0	3.6	47	39	82	53	286	255	52	15	6.0	3.2
9	200	3.6	41	36	77	45	754	178	45	13	5.1	3.0
10	90	3.4	39	35	75	41	431	112	40	13	4.8	2.8
11	45	3.2	37	32	77	37	318	94	36	12	4.6	2.5
12	25	4.8	28	29	75	34	227	91	34	11	4.5	3.5
13	15	8.3	26	27	74	33	178	936	32	11	4.4	5.6
14	10	6.1	23	27	76	33	256	1150	30	12	4.4	8.0
15	8.0	4.6	352	25	62	30	198	1890	29	12	4.4	4.5
16	6.4	4.0	438	24	55	29	150	596	29	11	4.2	3.0
17	5.2	3.7	216	23	50	28	106	355	23	11	5.0	2.5
18	4.6	3.4	144	20	45	29	91	250	34	12	6.0	2.2
19	4.0	3.2	114	18	44	28	78	290	24	12	5.0	2.0
20	4.5	207	85	16	40	29	68	221	25	14	4.6	1.8
21	5.0	508	68	54	37	68	60	181	22	10	5.2	1.6
22	4.2	237	59	459	37	53	53	295	20	8.5	5.2	3.5
23	3.8	143	56	240	37	45	54	216	20	7.4	5.7	2.0
24	3.8	104	65	182	35	42	73	149	19	7.2	7.7	1.7
25	3.8	73	1190	135	32	39	62	102	19	7.8	7.6	2.0
26	3.8	60	840	107	29	37	57	82	18	8.1	6.6	1.8
27	3.6	127	549	88	28	55	53	69	19	7.3	6.0	1.7
28	3.6	510	463	75	29	51	51	61	25	6.7	17	1.6
29	3.4	286	284	73	---	44	187	56	43	6.2	11	1.5
30	3.8	157	206	84	---	43	3260	50	24	6.1	7.0	1.4
31	4.2	---	153	74	---	44	---	45	---	5.8	5.4	---
TOTAL	488.6	2494.1	6034	2515	2361	1253	7558	17313	1885	385.1	228.3	101.5
MEAN	15.8	83.1	195	81.1	84.3	40.4	252	558	62.8	12.4	7.36	3.38
MAX	200	510	1190	459	405	87	3260	3970	588	35	28	8.0
MIN	2.9	3.2	23	16	28	25	44	45	18	5.8	4.2	1.4
CFSM	.24	1.28	2.99	1.24	1.29	.62	3.87	8.56	.96	.19	.11	.05
IN.	.28	1.42	3.44	1.43	1.35	.71	4.31	9.88	1.08	.22	.13	.06

CAL YR 1982 TOTAL 29934.4 MEAN 82.0 MAX 1980 MIN 2.9 CFSM 1.26 IN 17.08
WTR YR 1983 TOTAL 42616.6 MEAN 117 MAX 3970 MIN 1.4 CFSM 1.79 IN 24.31

03302300 LITTLE INDIAN CREEK NEAR GALENA, IN

LOCATION.--Lat 38°19'19", long 85°55'53", in NE¼SW¼ sec.23, T.2 S., R.5 E., Floyd County, Hydrologic Unit 05140104, on right bank at downstream side of county road bridge, 2 miles south of Galena, 3.6 miles upstream from mouth, and 7.0 miles northwest of New Albany.

DRAINAGE AREA.--16.1 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--15 years, 24.4 ft^3/s, 20.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft^3/s July 21, 1973, gage height, 9.30 ft; from rating curve extended above 3,100 ft^3/s on basis of contracted-opening measurement at 7.34 ft; no flow for many days in 1969, 1975, 1976, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	1545	2280	6.70	May 1	unknown	*4000	*7.90[a]
Apr. 30	0900	2200	6.62	May 3	unknown	1800	unknown

Minimum daily discharge, no flow Sept. 8-11, 24-30.

[a] From peak-stage indicator.

NOTE.--No gage-height record May 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	1.2	26	23	17	6.6	13	1000	9.2	1.6	.13	.08
2	.56	1.5	22	19	80	6.6	24	180	8.0	1.5	.25	.04
3	.47	2.3	19	16	45	5.7	29	480	53	1.3	.07	.03
4	.41	1.7	18	14	35	5.3	25	138	25	9.4	.05	.02
5	.37	1.7	25	13	28	5.3	22	67	16	4.4	.05	.01
6	.35	1.5	23	13	25	29	25	45	13	1.3	.04	.02
7	.38	1.3	19	11	22	20	34	45	11	1.1	.04	.01
8	.34	1.3	16	10	18	17	145	58	8.5	.93	.04	.00
9	19	1.3	15	9.9	18	14	178	38	6.8	.89	.04	.00
10	6.1	1.3	13	9.0	18	13	90	30	5.6	.77	.03	.00
11	2.8	1.2	13	8.2	18	12	60	26	4.9	.68	.03	.00
12	2.3	5.7	11	7.6	18	10	42	23	4.5	.60	.04	.53
13	2.1	4.2	10	7.2	18	9.4	50	162	4.1	.50	.04	.93
14	1.7	2.3	9.1	6.8	17	9.4	100	220	3.9	.43	.04	.42
15	1.5	1.9	163	6.4	16	8.4	60	322	3.7	.36	.04	.16
16	1.3	1.7	103	5.0	15	7.4	45	90	3.9	.28	.04	.08
17	1.3	1.5	43	4.6	14	7.0	35	50	3.6	.22	.13	.08
18	1.2	1.3	30	4.1	14	7.0	26	38	3.6	.15	.49	.04
19	.89	1.2	26	3.5	13	7.0	21	172	4.6	.10	.46	.03
20	.89	60	21	3.2	12	7.9	18	66	4.3	.08	.16	.02
21	.89	120	19	20	12	31	15	44	3.6	.05	.12	.03
22	.89	55	17	110	11	20	13	106	2.5	.05	.13	.03
23	.89	32	32	70	10	17	13	53	2.3	.05	.80	.02
24	.76	25	48	40	9.9	15	20	34	2.1	.04	.45	.00
25	.76	18	539	28	8.9	13	15	25	1.9	.04	.27	.00
26	.76	19	155	23	7.0	12	12	20	1.9	.04	.20	.00
27	.76	60	377	19	6.6	18	11	17	1.7	.04	.26	.00
28	.76	232	127	17	6.6	17	10	16	2.8	.04	1.2	.00
29	.76	57	60	16	---	14	35	16	1.8	.04	.84	.00
30	.76	32	40	19	---	14	521	13	1.7	.03	.50	.00
31	1.0	---	30	18	---	14	---	11	---	.03	.27	---
TOTAL	53.61	746.1	2069.1	574.5	533.0	393.0	1707	3605	219.5	27.04	7.25	2.58
MEAN	1.73	24.9	66.7	18.5	19.0	12.7	56.9	116	7.32	.87	.23	.086
MAX	19	232	539	110	80	31	521	1000	53	9.4	1.2	.93
MIN	.34	1.2	9.1	3.2	6.6	5.3	10	11	1.7	.03	.03	.00
CFSM	.11	1.55	4.14	1.15	1.18	.79	3.53	7.21	.46	.05	.01	.005
IN.	.12	1.72	4.78	1.33	1.23	.91	3.94	8.33	.51	.06	.02	.01

CAL YR 1982 TOTAL 9427.20 MEAN 25.8 MAX 718 MIN .07 CFSM 1.60 IN 21.78
WTR YR 1983 TOTAL 9937.68 MEAN 27.2 MAX 1000 MIN .00 CFSM 1.69 IN 22.96

03302500 INDIAN CREEK NEAR CORYDON, IN

LOCATION.--Lat 38°16'35", long 86°06'35", in SW¼SE¼ sec.6, T.3 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on upstream side of bridge on State Highway 335, 0.6 mile upstream from Raccoon Branch, 4.5 miles north of Corydon, and at mile 33.7.

DRAINAGE AREA.--129 mi², of which 10.6 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1961, published as Big Indian Creek near Corydon.

REVISED RECORDS.--WSP 1275: Drainage area. WSP 1385: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 577.12 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1948, nonrecording gage, and Dec. 9, 1948, to June 12, 1952, recorder records for stages above 6.3 ft at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--40 years, 172 ft³/s, 18.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s Mar. 5, 1964, gage height, 22.64 ft; no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0200	4700	13.86	May 1	2100	*11,400	*18.64
Apr. 30	1900	5920	15.02	May 3	1500	7200	16.08

Minimum daily discharge, 0.33 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	9.0	195	254	143	45	89	6620	77	16	43	5.7
2	5.5	11	161	206	593	43	145	3140	68	13	33	4.6
3	5.0	36	132	170	551	40	303	4820	281	12	10	3.5
4	4.7	42	114	141	358	39	251	1330	229	11	5.6	2.6
5	4.4	17	121	123	265	38	206	655	125	90	3.9	2.2
6	3.9	12	178	112	237	249	196	462	93	29	3.8	1.8
7	4.4	9.4	133	101	208	222	234	377	77	17	2.9	1.5
8	3.5	8.1	107	86	162	154	1070	439	65	13	2.1	1.2
9	8.3	7.4	91	77	162	120	1550	312	56	11	1.6	.94
10	73	7.0	80	73	150	101	785	249	48	10	1.4	.70
11	24	7.0	73	68	146	87	562	205	42	9.1	1.3	.47
12	15	10	64	61	137	76	413	185	36	8.2	1.2	1.2
13	12	32	55	54	123	69	387	793	33	7.5	1.2	5.0
14	10	36	53	51	120	66	772	1200	30	6.9	1.1	2.9
15	9.7	20	337	49	116	61	567	1990	27	6.4	1.0	2.1
16	8.1	15	1030	45	108	54	397	842	26	5.9	.86	2.2
17	7.8	13	396	43	100	50	304	482	28	5.5	.86	2.1
18	6.7	12	258	39	89	51	237	353	71	5.1	1.3	1.6
19	7.0	11	206	31	84	53	190	741	36	4.7	1.9	1.1
20	8.1	20	169	28	77	49	157	570	265	4.4	2.8	.86
21	9.0	544	138	49	70	132	132	376	69	4.2	2.6	.78
22	9.4	436	117	959	66	132	114	635	42	4.0	1.9	.78
23	9.4	225	116	604	66	102	104	489	31	3.8	1.6	.70
24	9.4	179	255	415	62	89	121	322	26	3.4	1.9	.62
25	8.5	119	1080	307	57	80	103	237	23	3.3	2.5	.70
26	8.1	92	1970	239	50	71	86	187	20	2.9	3.1	.62
27	7.8	313	2330	195	47	101	76	151	18	2.9	2.7	.54
28	8.1	1030	1310	163	46	123	76	131	20	2.4	4.5	.54
29	9.0	565	642	145	---	101	141	125	21	2.1	7.0	.47
30	9.7	286	434	168	---	93	3330	107	21	2.0	7.3	.33
31	9.7	---	330	157	---	92	---	89	---	3.8	7.4	---
TOTAL	325.3	4123.9	12675	5213	4393	2783	13098	28614	2004	320.5	163.32	50.35
MEAN	10.5	137	409	168	157	89.8	437	923	66.8	10.3	5.27	1.68
MAX	73	1030	2330	959	593	249	3330	6620	281	90	43	5.7
MIN	3.5	7.0	53	28	46	38	76	89	18	2.0	.86	.33
CFSM	.08	1.06	3.17	1.30	1.22	.70	3.39	7.16	.52	.08	.04	.01
IN.	.09	1.19	3.66	1.50	1.27	.80	3.78	8.25	.58	.09	.05	.01

CAL YR 1982 TOTAL 70009.00 MEAN 192 MAX 7160 MIN 3.3 CFSM 1.49 IN 20.19
WTR YR 1983 TOTAL 73763.37 MEAN 202 MAX 6620 MIN .33 CFSM 1.57 IN 21.27

03302680 WEST FORK BLUE RIVER AT SALEM, IN

LOCATION.--Lat 38°36'19", long 86°05'40", in SW¼SE¼ sec.17, T.2 N., R.4 E., Washington County, Hydrologic Unit 05140104, on left bank at downstream side of bridge on East Market Street, 0.35 mile east of County Court House in Salem, 6.0 miles upstream from Hoggatt Branch, and 6.9 miles upstream from mouth.

DRAINAGE AREA.--19.0 mi².

PERIOD OF RECORD.--July 1970 to current year. Prior to December 10, 1970, nonrecording gage at site 0.55 mile (0.88 km) downstream at datum 5.04 ft lower. Low-flow records not equivalent due to effluent from factory entering stream from right bank between sites.

GAGE.--Water-stage recorder. Datum of gage 713.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 24.3 ft³/s, 17.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s May 1, 1983, gage height, 13.14 ft from rating curve extended above 900 ft³/s by a step-backwater analysis; minimum daily, 0.02 ft³/s Sept. 24, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 8	0845	1310	7.65	May 2	1850	1310	7.65
Apr. 9	0800	1110	6.82	May 3	0530	2380	9.72
Apr. 30	0945	3520	11.26	May 15	1345	1120	7.17
May 1	0830	*5400	*13.14				

Minimum daily discharge, 0.06 ft³/s Aug. 16, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	4.2	68	38	20	7.1	9.2	1540	10	1.1	21	5.4
2	1.1	4.7	55	30	96	6.7	17	357	8.5	.86	1.3	.79
3	1.1	6.2	44	23	69	6.5	18	696	63	.64	.54	.43
4	1.2	5.9	39	19	40	6.2	16	212	34	.77	.29	.22
5	1.1	5.0	52	18	31	6.2	15	111	21	1.2	.16	.09
6	.84	4.9	46	16	28	25	22	74	17	.70	.15	.14
7	28	4.5	34	15	23	19	49	62	14	.52	.13	.12
8	11	4.5	28	13	20	16	373	62	12	.45	.12	.12
9	206	4.4	23	12	18	13	393	41	10	.38	.10	.10
10	76	4.2	21	11	18	12	148	33	8.1	.35	.10	.09
11	42	4.2	18	11	17	11	97	26	7.2	.34	.09	2.4
12	28	18	14	9.4	15	10	68	22	6.6	.29	.09	2.5
13	21	11	12	8.2	14	10	75	20	5.8	.25	.07	.51
14	16	6.7	11	7.7	14	10	269	124	5.2	.23	.07	.16
15	13	5.1	65	7.4	13	9.2	104	367	5.0	.20	.07	.13
16	10	4.5	106	7.3	13	8.6	62	116	4.6	.16	.06	.12
17	8.2	4.2	66	6.8	12	8.4	42	63	3.9	.14	.07	.12
18	6.9	4.2	48	6.0	11	9.3	28	47	3.8	.14	.14	.12
19	6.2	3.9	41	5.5	11	8.5	22	44	5.2	.13	.09	.10
20	8.9	17	30	5.0	10	9.7	18	33	5.6	.13	.07	.11
21	7.0	116	23	26	9.4	29	15	30	3.5	.13	.06	.61
22	5.2	110	21	172	9.6	18	13	60	2.9	.14	26	.70
23	4.9	130	81	71	9.7	14	12	40	2.4	.13	5.5	.39
24	4.4	100	102	43	9.3	13	12	32	2.2	.14	.65	.22
25	4.1	64	214	33	8.3	12	10	26	1.9	.14	.28	.16
26	3.8	54	139	28	7.5	11	9.3	21	1.7	.13	.24	.14
27	3.7	83	520	24	7.2	13	8.8	18	1.4	.12	.13	.14
28	3.5	235	189	20	7.2	11	9.3	17	2.0	.12	.53	.13
29	3.5	107	107	19	---	9.4	9.3	16	1.9	.10	.35	.13
30	3.9	70	73	21	---	8.8	774	13	1.6	.10	.14	.12
31	3.8	---	52	19	---	8.9	---	12	---	.12	16	---
TOTAL	535.44	1196.3	2342	745.3	561.2	360.5	2717.9	4335	272.0	10.35	74.59	16.51
MEAN	17.3	39.9	75.5	24.0	20.0	11.6	90.6	140	9.07	.33	2.41	.55
MAX	206	235	520	172	96	29	774	1540	63	1.2	26	5.4
MIN	.84	3.9	11	5.0	7.2	6.2	8.8	12	1.4	.10	.06	.09
CFSM	.91	2.10	3.97	1.26	1.05	.61	4.77	7.37	.48	.02	.13	.03
IN.	1.05	2.34	4.59	1.46	1.10	.71	5.32	8.49	.53	.02	.15	.03

CAL YR 1982 TOTAL 12577.39 MEAN 34.5 MAX 923 MIN .28 CFSM 1.82 IN 24.62
WTR YR 1983 TOTAL 13167.09 MEAN 36.1 MAX 1540 MIN .06 CFSM 1.90 IN 25.78

03302800 BLUE RIVER AT FREDERICKSBURG, IN

LOCATION.--Lat 38°26'02", long 86°11'31", in NE¼NW¼ sec.16, T.1 S., R.3 E., Washington County, Hydrologic Unit 05140104, on downstream side of bridge on U.S. Highway 150 at Fredericksburg, 0.5 mile downstream from South Fork Blue River, and at mile 57.1.

DRAINAGE AREA.--283 mi², of which 76.9 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 341 ft³/s, 16.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft³/s May 2, 1983, gage height, 24.37 ft,; minimum daily, 6.1 ft³/s Oct. 18, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 29.20 ft, from floodmark, on left upstream wingwall.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0400	5920	15.79	May 2	0100	*13,500	*24.37
Dec. 27	2400	8440	19.01	May 3	1800	9,260	19.95
Apr. 08	2100	7380	17.73	May 15	2100	5,240	14.78

Minimum daily discharge, 6.7 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	40	702	631	272	105	144	10800	228	51	90	26
2	21	41	677	533	880	104	130	8650	208	48	112	37
3	19	43	561	440	1080	102	416	7020	254	44	41	24
4	18	49	498	372	679	101	343	4210	502	48	27	19
5	17	50	479	330	522	99	290	1620	284	48	21	17
6	16	43	793	301	454	305	330	1110	234	46	18	16
7	19	41	571	274	418	482	675	854	208	41	16	16
8	77	39	457	238	342	338	4080	1020	191	38	14	13
9	828	38	385	218	289	268	4990	751	174	36	13	13
10	871	38	336	207	292	229	2170	608	160	35	11	12
11	350	37	318	197	285	200	1310	513	151	33	10	14
12	231	43	278	180	268	178	953	431	141	31	9.5	47
13	174	102	238	164	240	166	924	480	131	29	9.0	32
14	136	88	203	152	226	157	2610	1100	123	28	8.3	21
15	112	65	376	145	223	151	1610	4450	116	27	8.6	14
16	92	60	1920	134	212	144	953	2410	113	27	8.8	13
17	79	56	958	120	200	133	720	1070	108	26	8.7	11
18	69	52	696	111	184	126	582	769	105	25	9.1	10
19	63	50	589	93	172	126	478	808	97	23	10	9.1
20	61	60	501	89	166	125	394	791	566	22	11	8.8
21	64	1020	404	110	153	276	334	605	206	21	19	10
22	60	1180	349	1700	146	333	292	1520	140	22	30	12
23	53	1090	430	1320	144	247	266	1080	116	22	74	12
24	49	1560	950	835	142	214	262	708	100	20	52	9.9
25	47	748	1600	617	133	193	233	570	90	19	38	9.1
26	45	550	3700	498	120	172	202	478	80	18	33	8.6
27	43	874	4500	415	110	177	184	400	70	18	25	8.0
28	42	2320	4570	355	107	187	177	354	80	17	28	7.7
29	41	1600	1590	319	---	164	251	332	70	19	24	7.4
30	40	889	1010	314	---	149	5000	287	59	18	26	6.7
31	40	---	775	306	---	144	---	252	---	17	22	---
TOTAL	3799	12866	31414	11718	8459	5895	31363	56051	5105	917	827.0	464.3
MEAN	123	429	1013	378	302	190	1045	1808	170	29.6	26.7	15.5
MAX	871	2320	4570	1700	1080	482	5000	10800	566	51	112	47
MIN	16	37	203	89	107	99	144	252	59	17	8.3	6.7
CFSM	.44	1.52	3.58	1.34	1.07	.67	3.69	6.39	.60	.11	.09	.06
IN.	.50	1.69	4.13	1.54	1.11	.77	4.12	7.37	.67	.12	.11	.06

CAL YR 1982 TOTAL 169206.0 MEAN 464 MAX 9900 MIN 14 CFSM 1.64 IN 22.24
WTR YR 1983 TOTAL 168878.3 MEAN 463 MAX 10800 MIN 6.7 CFSM 1.64 IN 22.20

03303000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in NW¼SE¼ sec.19, T.3 S., R.3 E., Harrison County, Hydrologic Unit 05140104, on left bank 400 ft downstream from Spring Creek, 600 ft upstream from bridge on Interstate 64, 0.2 mile upstream from bridge on State Highway 62, 0.8 mile north of White Cloud, and at mile 14.7 .

DRAINAGE AREA.--476 mi², of which 192 mi² does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, IN, enters Blue River via solution channel in Karst area through Harrison Spring.

PERIOD OF RECORD.--October 1930 to current year. Monthly figures only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1921-32, 1933(M), 1935-38(M), 1944. WSP 1385: Drainage area. WSP 1555: 1953. WDR IN-75-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 434.26 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--53 years, 634 ft³/s, 18.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft³/s Jan. 22, 1959, gage height, 23.07 ft; minimum daily, 9.6 ft³/s Oct. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 28	1200	11,300	13.49	May [illegible]	1800	*24,200	*20.64
Apr. 9	1100	9,070	12.06	May 15	1100	9610	12.40

Minimum daily discharge, 30 ft³/s Sept. 29,30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	72	1270	1320	593	287	346	19300	523	153	48	45
2	69	72	1130	1090	1360	281	420	22200	477	136	98	43
3	66	77	972	930	2330	270	707	13100	793	122	205	40
4	64	71	850	800	1490	260	793	10200	853	129	105	46
5	59	71	901	709	1110	250	668	4040	714	190	77	47
6	57	83	1280	647	948	555	625	2720	538	179	92	41
7	54	83	1110	608	872	930	952	2100	469	142	60	36
8	54	76	872	545	756	750	4180	2070	427	115	55	34
9	131	71	735	495	662	590	7800	1800	396	105	51	32
10	1770	69	642	469	642	504	5430	1430	364	99	47	32
11	783	68	588	448	612	452	2790	1200	340	93	44	31
12	460	85	541	415	569	410	2000	1050	320	89	42	37
13	330	109	477	383	527	381	1700	3340	304	83	41	43
14	264	144	431	360	500	363	3710	3390	285	79	39	63
15	215	183	805	345	486	347	4180	7640	266	76	38	65
16	183	131	2850	330	473	327	2180	6040	253	73	37	51
17	157	112	2150	312	452	310	1590	2710	236	71	38	44
18	136	101	1390	294	427	304	1270	1810	266	69	42	39
19	121	92	1120	270	403	301	1060	1830	248	68	48	35
20	119	160	954	237	387	302	895	1820	319	65	52	33
21	114	1230	789	291	372	470	772	1400	601	62	42	35
22	105	2090	672	1800	356	685	683	2880	321	59	39	35
23	105	1790	632	2880	353	560	622	2780	256	57	41	33
24	96	2510	1200	1640	345	481	588	1730	217	56	49	33
25	92	1500	2490	1240	334	444	555	1300	196	56	96	33
26	86	1000	6520	996	312	410	495	1080	182	55	69	34
27	83	1450	6150	844	298	413	456	897	177	52	54	33
28	79	2980	9770	735	287	420	431	782	173	49	100	31
29	76	3870	3920	657	---	398	574	730	183	48	95	30
30	74	1820	2270	652	---	361	7020	660	164	47	60	30
31	74	---	1650	652	---	347	---	583	---	46	50	---
TOTAL	6150	22170	57131	23394	18256	13163	55492	124612	10861	2723	1954	1164
MEAN	198	739	1843	755	652	425	1850	4020	362	87.8	63.0	38.8
MAX	1770	3870	9770	2880	2330	930	7800	22200	853	190	205	65
MIN	54	68	431	237	287	250	346	583	164	46	37	30
CFSM	.42	1.55	3.87	1.59	1.37	.89	3.89	8.45	.76	.18	.13	.08
IN.	.48	1.73	4.46	1.83	1.43	1.03	4.34	9.74	.85	.21	.15	.09

CAL YR 1982 TOTAL 328642 MEAN 900 MAX 14000 MIN 51 CFSM 1.89 IN 25.68
WTR YR 1983 TOTAL 337070 MEAN 923 MAX 22200 MIN 30 CFSM 1.94 IN 26.34

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in SW1/4 NE1/4 sec.27, T.4 S., R.3 W., Perry County, Hydrologic Unit 05140201, on left bank at downstream side of bridge on State Highway 145 at Bristow, 2.0 miles downstream from Coon Branch, 5.8 miles upstream from Sulphur Fork Creek, and at mile 14.1.

DRAINAGE AREA.--39.8 mi².

PERIOD OF RECORD.--August 1961 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Forest Service and Middle Fork Anderson River Conservancy District control structures beginning June 1967.

AVERAGE DISCHARGE.--22 years, 59.5 ft³/s, 20.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft³/s Mar. 9, 1964; maximum gage height, 19.33 ft Mar. 4, 1964; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 20.0 ft, from floodmark, discharge, 15,000 ft³/s, from rating curve extended above 7,000 ft³/s. This is the maximum flood since 1905, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,940 ft³/s Apr. 30, gage height, 16.11 ft; No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	2.0	125	350	53	17	40	871	27	1.1	1.2	.06
2	5.1	1.8	98	198	218	16	95	654	24	.89	.51	.00
3	4.7	2.0	83	80	185	16	132	997	234	5.2	.22	.00
4	4.4	2.4	89	59	129	14	108	754	217	7.1	.14	.00
5	5.1	2.2	93	51	100	16	93	595	115	6.2	.03	.00
6	5.5	2.0	90	47	87	247	91	513	74	4.1	.03	.00
7	7.1	2.0	75	42	76	184	134	496	54	3.3	.03	.00
8	9.0	2.8	64	38	64	126	529	527	43	2.2	.00	.00
9	37	2.8	54	36	58	95	410	479	35	1.8	.00	.00
10	32	5.1	48	36	53	76	370	456	29	1.3	.00	.00
11	21	8.5	43	34	48	62	302	491	25	1.2	.00	.00
12	16	15	36	31	43	53	175	473	21	.97	.00	.00
13	11	16	31	29	40	45	161	514	18	.76	.00	.00
14	9.0	11	29	28	38	41	470	668	15	.59	.00	.00
15	7.5	8.0	211	26	35	38	343	733	12	.51	.00	.00
16	5.8	6.7	307	24	33	36	267	482	11	.45	.00	.00
17	4.7	6.7	191	24	30	30	142	444	9.0	.51	.00	.00
18	3.8	6.2	132	22	29	30	98	427	8.1	1.5	.00	.00
19	3.3	6.7	106	20	27	29	76	431	4.9	3.0	.00	.00
20	7.5	53	86	19	25	37	60	381	4.6	5.1	.00	.00
21	6.7	203	70	75	24	103	51	317	5.3	4.7	.00	.00
22	4.7	156	60	326	23	72	46	258	4.8	3.2	.00	.00
23	3.8	158	63	265	23	60	43	149	4.4	2.2	.00	.00
24	3.3	158	82	192	22	52	40	106	4.1	1.2	.00	.00
25	2.8	111	438	132	21	46	34	79	3.8	.86	.00	.00
26	2.4	93	501	100	20	42	30	63	4.1	.67	.00	.00
27	2.0	194	770	80	18	55	29	50	8.4	.38	.00	.00
28	2.0	369	580	66	18	52	34	44	12	.32	.00	.00
29	1.8	300	492	58	---	45	167	41	9.8	.32	.10	2.0
30	5.1	188	459	63	---	42	1030	35	2.6	.27	.32	2.2
31	1.5	---	420	56	---	41	---	30	---	.22	.27	---
TOTAL	241.1	2092.9	5926	2607	1540	1818	5600	12558	1039.9	62.12	2.85	4.26
MEAN	7.78	69.8	191	84.1	55.0	58.6	187	405	34.7	2.00	.092	.14
MAX	37	369	770	350	218	247	1030	997	234	7.1	1.2	2.2
MIN	1.5	1.8	29	19	18	14	29	30	2.6	.22	.00	.00
CFSM	.20	1.75	4.80	2.11	1.38	1.47	4.70	10.2	.87	.05	.002	.004
IN.	.23	1.96	5.54	2.44	1.44	1.70	5.23	11.74	.97	.06	.00	.00

CAL YR 1982 TOTAL 31702.90 MEAN 86.9 MAX 896 MIN 1.5 CFSM 2.18 IN 29.63
WTR YR 1983 TOTAL 33492.13 MEAN 91.8 MAX 1030 MIN .00 CFSM 2.31 IN 31.30

03303400 CROOKED CREEK NEAR SANTA CLAUS, IN

LOCATION.--Lat 38°07'05", long 86°53'24", in SW1/4 SE1/4 sec. 31, T.4 S., R.4 W., Spencer County, Hydrologic Unit 05140201, on right bank at upstream side of bridge on county road, 1.3 miles east of Santa Claus Post Office, and 1.8 miles upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 404.34 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 11.5 ft^3/s, 19.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft^3/s Apr. 28, 1970, gage height, 9.74 ft, from rating curve extended above 450 ft^3/s on basis of two indirect measurements of peak flow at site 1.6 miles downstream, drainage area, 16.0 mi^2, adjusted to gage site; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	1545	1150	9.20	Apr. 8	0830	821	9.07
Dec. 27	1330	887	9.09	Apr. 30	0845	*2170	*9.46
Feb. 2	unknown	1070	9.17				

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.57	11	7.5	8.0	2.3	9.3	233	9.0	.42	.00	.00
2	1.4	.61	8.8	6.2	200	2.0	53	86	25	.28	.00	.00
3	1.2	.66	15	4.8	26	1.8	30	229	54	.36	.00	.00
4	.99	.50	30	4.3	16	1.7	16	36	25	.36	.00	.00
5	.89	.46	34	3.9	10	26	14	20	13	.42	.00	.00
6	.79	.39	19	3.8	9.1	92	20	16	8.0	.28	.00	.00
7	.84	.39	11	3.5	8.4	25	45	24	4.5	.11	.00	.00
8	1.4	.39	7.9	3.2	5.8	12	251	46	2.6	.00	.00	.00
9	36	.36	6.3	3.2	5.0	7.3	65	15	1.7	.00	.00	.00
10	16	.33	5.8	3.1	4.7	5.4	35	11	1.3	.00	.00	.00
11	6.9	.36	5.4	3.0	4.2	4.4	24	9.1	1.0	.00	.00	.00
12	3.9	2.0	4.7	2.7	3.5	3.9	16	12	1.0	.00	.00	.00
13	2.6	1.1	4.3	2.5	3.3	3.5	72	32	1.0	.00	.00	.00
14	1.7	.89	4.3	2.3	3.3	3.3	181	107	1.1	.00	.00	.00
15	1.5	.74	136	2.2	3.0	3.0	22	154	1.1	.00	.00	.00
16	1.2	.70	50	2.0	2.9	2.7	13	29	1.0	.00	.00	.00
17	.99	.70	17	1.9	2.6	2.6	11	16	.95	.00	.00	.00
18	.94	.70	12	1.8	2.5	3.4	9.3	13	.95	.00	.00	.00
19	.84	.70	8.8	1.6	2.4	3.2	7.1	11	.87	.00	.00	.00
20	1.7	5.3	6.6	1.5	2.3	26	5.9	14	.95	.00	.00	.00
21	1.3	25	5.4	10	2.3	36	5.6	24	.87	.00	.00	.00
22	1.1	20	5.1	25	2.3	13	5.6	42	.73	.00	.00	.00
23	.94	18	16	72	2.5	8.0	4.7	13	.65	.00	.00	.60
24	.89	12	24	38	2.3	6.5	3.8	9.0	.58	.00	.00	.22
25	.79	4.5	250	20	2.1	4.8	3.6	7.0	.58	.00	.00	.00
26	.70	14	62	12	2.3	8.9	3.3	6.0	.50	.00	.00	.00
27	.70	59	280	9.0	2.1	17	3.4	4.8	.50	.00	.00	.22
28	.66	122	83	7.0	2.4	8.2	19	11	.50	.00	.00	.22
29	.66	22	19	6.0	---	5.9	576	7.0	.50	.00	.00	.11
30	.57	13	14	8.0	---	5.6	296	3.5	.46	.00	.00	.58
31	.57	---	11	5.4	---	5.6	---	3.1	---	.00	.00	---
TOTAL	92.16	327.35	1167.4	277.4	341.3	351.0	1820.6	1243.5	159.89	2.23	.00	1.95
MEAN	2.97	10.9	37.7	8.95	12.2	11.3	60.7	40.1	5.33	.072	.000	.065
MAX	36	122	280	72	200	92	576	233	54	.42	.00	.60
MIN	.57	.33	4.3	1.5	2.1	1.7	3.3	3.1	.46	.00	.00	.00
CFSM	.38	1.39	4.80	1.14	1.55	1.44	7.72	5.10	.68	.009	.000	.008
IN.	.44	1.55	5.52	1.31	1.62	1.66	8.62	5.88	.76	.01	.00	.01

CAL YR 1982 TOTAL 4726.57 MEAN 12.9 MAX 550 MIN .17 CFSM 1.64 IN 22.37
WTR YR 1983 TOTAL 5784.78 MEAN 15.8 MAX 576 MIN .00 CFSM 2.01 IN 27.37

03322100 PIGEON CREEK AT EVANSVILLE, IN

LOCATION.--Lat 38°00'14", long 87°32'19", in NE¼NW¼ sec.16, T.6 S., R.10 W., Vanderburgh County, Hydrologic Unit 05140202, on left bank in the median strip of old U.S. Highway 41, between two steel truss bridges, at Evansville, and at mile 6.0.

DRAINAGE AREA.--323 mi^2.

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WSP 2109: 1960. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 352.24 ft National Geodetic Vertical Datum of 1929. Nonrecording auxiliary gage at site 1.2 miles upstream at same datum. Prior to October 1, 1968, water-stage recorder, and October 1, 1968, to September 30, 1971, nonrecording gage used at site 1.2 miles upstream, as base gage, and present base gage was used as auxiliary gage.

REMARKS.--Records good except those for periods of no gage-height record and backwater effect, which are poor. Backwater or reverse flow from the Ohio River generally occurs when the stage of the Ohio River at Evansville (Sta. 03322000) exceeds a gage height of about 24 ft.

AVERAGE DISCHARGE.--23 years, 368 ft^3/s, 15.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s May 10, 1961, gage height, 27.94 ft; minimum daily (unaffected by backwater), 1.0 ft^3/s Aug. 30 to Sept. 1, Oct. 11, 12, 21, 22, 26, 1964; zero or reverse flow occurs at times due to extreme stages on the Ohio River.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,640 ft^3/s May 3; maximum gage height (affected by backwater), 23.45 ft May 5; minimum daily discharge, 1.5 ft^3/s, Sept. 11, 19.

NOTE.--No gage-height record Oct. 1 to Nov. 5. Backwater from Ohio River, Jan. 2, 3, Feb. 6-9, Apr. 12-24. May 1 to June 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	1200	3080	282	50	368	6290	201	250	9.4	7.6
2	15	20	700	1180	1150	47	1280	6900	156	100	9.7	5.6
3	13	40	3000	531	1310	42	1410	8640	1270	66	8.4	6.4
4	12	35	5000	270	1150	41	1110	8230	1560	210	7.1	6.0
5	10	25	5600	200	450	135	561	7340	1710	175	6.6	4.0
6	9.4	22	5200	168	182	2210	1390	6030	2170	85	7.1	2.9
7	480	19	4200	156	46	1920	1800	4560	1850	50	8.1	2.7
8	60	19	2580	137	81	1960	2770	3340	595	38	9.5	2.2
9	2000	17	1890	123	218	1630	3720	2270	196	32	9.6	1.8
10	250	16	702	120	178	622	3850	1200	143	29	7.8	1.8
11	100	16	328	118	164	280	4070	772	108	29	6.3	1.5
12	64	32	257	108	148	208	2800	560	92	30	6.1	2.2
13	50	106	193	94	121	164	1490	1270	83	34	6.0	6.4
14	44	81	147	89	116	143	2460	1900	81	36	5.7	40
15	40	38	667	86	114	123	1780	2840	95	35	6.7	22
16	36	29	1410	73	106	104	1930	2280	76	32	7.3	10
17	32	25	1170	63	97	97	2130	2650	70	27	8.0	4.9
18	28	23	601	54	85	106	1220	2720	123	29	7.1	2.4
19	26	23	338	38	86	143	670	2020	94	28	7.6	1.5
20	40	48	275	43	89	294	380	1030	70	29	10	2.2
21	38	193	227	218	85	1210	221	792	57	27	11	6.4
22	32	1000	164	1310	79	896	190	2600	50	26	10	6.4
23	26	820	392	1380	75	343	165	2060	45	25	11	6.4
24	25	300	1150	1160	73	218	145	1890	41	26	8.8	6.4
25	26	220	2150	635	67	172	125	1770	38	40	18	6.4
26	23	210	2830	408	58	154	101	878	36	23	13	6.8
27	21	1700	3250	285	52	702	111	383	35	25	11	6.8
28	20	2000	4730	242	50	1050	520	379	74	22	16	6.8
29	19	700	4950	216	---	462	1850	601	150	16	16	7.2
30	18	500	4750	456	---	246	5610	476	350	12	27	7.6
31	17	---	4160	422	---	227	---	323	---	10	16	---
TOTAL	3592.4	8295	64211	13463	6712	15999	46227	84994	11619	1596	311.9	201.3
MEAN	116	277	2071	434	240	516	1541	2742	387	51.5	10.1	6.71
MAX	2000	2000	5600	3080	1310	2210	5610	8640	2170	250	27	40
MIN	9.4	16	147	38	46	41	101	323	35	10	5.7	1.5
CFSM	.36	.86	6.41	1.34	.74	1.60	4.77	8.49	1.20	.16	.03	.02
IN.	.41	.96	7.40	1.55	.77	1.84	5.32	9.79	1.34	.18	.04	.02

CAL YR 1982 TOTAL 225762.50 MEAN 619 MAX 5960 MIN .00 CFSM 1.92 IN 26.00
WTR YR 1983 TOTAL 257221.60 MEAN 705 MAX 8640 MIN 1.5 CFSM 2.18 IN 29.62

03322500 WABASH RIVER NEAR NEW CORYDON, IN

LOCATION.--Lat 40°33'50", long 84°48'10", in NE¼SE¼ sec.3, T.24 N., R.15 E., Jay County, Hydrologic Unit 05120101, on left bank 10 ft downstream from county bridge on Indiana-Ohio State line road, 2 miles east of New Corydon, 2.8 miles downstream from Beaver Creek, and at mile 466.0.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1555: 1957(P). WSP 1909: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft National Geodetic Vertical Datum of 1929. Prior to June 24, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--32 years, 199 ft³/s, 10.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s Jan. 22, 1959; gage height, 20.47 ft, from floodmarks; minimum daily, 0.8 ft³/s Dec. 22, 23, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1800	*2860	*16.88

Minimum daily discharge, 4.5 ft³/s Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	17	84	134	127	36	54	1320	67	242	17	5.9
2	6.3	29	50	118	495	34	351	2510	65	150	12	6.3
3	5.6	41	49	105	862	31	589	1930	63	73	12	5.9
4	5.2	35	84	96	360	29	264	1020	66	108	11	5.6
5	5.0	22	140	95	240	28	159	458	60	302	11	6.3
6	5.2	17	150	96	195	26	142	279	60	77	11	5.4
7	5.8	16	85	93	145	26	823	212	61	50	10	9.6
8	7.3	15	55	88	128	28	701	213	55	36	9.1	13
9	9.0	12	38	83	119	63	336	200	54	28	8.4	7.0
10	11	11	31	85	111	53	442	171	50	26	9.0	5.7
11	11	14	27	88	107	41	324	151	48	24	9.8	5.2
12	7.7	16	23	84	101	31	254	138	45	20	12	5.0
13	4.5	33	21	80	98	26	199	128	42	17	11	4.9
14	6.2	28	20	101	96	25	1270	120	40	16	10	4.9
15	6.2	19	23	105	112	24	1440	113	38	15	8.9	5.0
16	6.6	17	499	106	132	22	524	120	40	14	7.5	6.0
17	7.3	16	289	100	170	19	254	107	42	13	7.5	7.2
18	7.7	13	133	95	165	19	181	98	40	11	8.8	8.6
19	6.9	15	108	90	154	24	135	99	70	11	10	7.8
20	6.5	20	175	86	137	23	106	96	86	10	9.7	6.4
21	6.2	57	122	82	125	213	89	88	58	12	9.0	8.2
22	6.9	77	86	88	121	266	77	192	45	11	7.6	9.3
23	6.2	73	79	188	81	138	72	286	38	15	7.2	11
24	5.7	164	156	305	55	99	70	156	30	14	6.9	9.0
25	6.2	77	303	236	50	77	61	113	27	11	6.6	7.4
26	5.3	57	406	182	41	65	55	107	24	12	7.2	6.8
27	5.7	81	533	151	34	63	52	93	21	12	7.0	6.2
28	6.2	234	1140	130	33	69	62	86	74	10	8.0	5.8
29	6.6	342	547	118	---	65	95	82	152	10	7.3	5.4
30	8.6	144	242	110	---	57	116	74	150	10	6.2	5.2
31	11	---	169	117	---	55	---	69	---	21	5.8	---
TOTAL	212.6	1712	5877	3635	4594	1775	9297	10829	1711	1381	285.0	206.0
MEAN	6.86	57.1	190	117	164	57.3	310	349	57.0	44.5	9.19	6.87
MAX	11	342	1140	305	862	266	1440	2510	152	302	17	13
MIN	4.5	11	20	80	33	19	52	69	21	10	5.8	4.9
CFSM	.03	.22	.73	.45	.63	.22	1.18	1.33	.22	.17	.04	.03
IN.	.03	.24	.83	.52	.65	.25	1.32	1.54	.24	.20	.04	.03

CAL YR 1982 TOTAL 113580.6 MEAN 311 MAX 2770 MIN 4.5 CFSM 1.19 IN 16.13
WTR YR 1983 TOTAL 41514.6 MEAN 114 MAX 2510 MIN 4.5 CFSM .44 IN 5.89

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE¼SE¼ sec.34, T.26 N., R.13 E., Adams County, Hydrologic Unit 05120101, on right bank 10 ft downstream from bridge on State Highway 218, 800 ft downstream from Shoemaker ditch, 0.8 mile north of Linn Grove, and 2.2 miles upstream from Rice ditch.

DRAINAGE AREA.--453 mi^2.

PERIOD OF RECORD.--September 1964 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation of Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--19 years, 370 ft^3/s, 11.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,560 ft^3/s Mar. 17, 1978, gage height, 13.87 ft; minimum daily, 5.1 ft^3/s Oct. 8, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1964 reached a stage of 13.13 ft, from floodmark, discharge, 6,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 16	0700	1950	8.78
May 4	0200	*3540	*10.94

Minimum daily discharge, 6.9 ft^3/s Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	19	265	307	190	69	119	704	102	352	21	11
2	12	30	178	231	517	69	716	2030	95	269	23	11
3	9.8	41	151	198	1360	67	1400	3010	94	196	19	10
4	8.6	47	366	170	1220	64	1050	3360	93	134	16	9.0
5	8.0	31	581	155	470	62	524	2460	95	454	16	10
6	10	23	501	147	300	61	354	1350	103	309	15	10
7	9.9	18	289	147	245	63	883	642	95	113	14	13
8	10	16	163	140	212	65	1360	431	88	69	13	13
9	12	15	117	129	190	66	1230	374	79	52	12	14
10	12	15	92	127	180	95	1170	300	75	50	12	14
11	13	14	79	133	165	82	995	255	67	39	12	11
12	16	18	69	129	150	67	771	222	64	33	14	9.3
13	14	31	63	119	145	60	519	202	61	28	13	8.8
14	12	36	59	119	143	55	1150	188	59	23	14	9.2
15	9.7	34	57	138	168	53	1770	185	56	22	12	8.9
16	8.9	25	588	131	225	50	1900	183	54	34	11	9.1
17	9.2	20	830	129	352	47	1290	173	55	33	10	10
18	9.3	19	384	121	345	47	612	151	58	22	11	10
19	11	18	242	116	291	50	348	147	65	20	12	11
20	9.2	21	349	110	247	54	247	147	107	20	13	9.5
21	7.3	42	301	116	210	183	196	136	113	19	12	8.8
22	7.1	136	195	134	192	564	163	178	78	19	11	9.8
23	7.0	155	157	180	181	378	145	438	61	19	10	12
24	7.8	382	313	360	130	249	134	328	51	18	9.5	14
25	7.9	283	1080	395	101	184	124	200	43	18	9.0	12
26	8.0	136	1420	300	86	144	110	178	38	18	11	9.9
27	8.0	193	1120	245	75	133	96	156	35	17	12	9.2
28	6.9	396	1550	190	69	205	99	137	75	16	11	8.7
29	8.4	958	1720	182	---	196	125	128	219	16	10	8.2
30	8.8	550	1200	184	---	147	158	119	201	16	12	7.9
31	11	---	536	211	---	125	---	109	---	21	12	---
TOTAL	304.8	3722	15015	5493	8159	3754	19758	18621	2479	2469	402.5	312.3
MEAN	9.83	124	484	177	291	121	659	601	82.6	79.6	13.0	10.4
MAX	16	958	1720	395	1360	564	1900	3360	219	454	23	14
MIN	6.9	14	57	110	69	47	96	109	35	16	9.0	7.9
CFSM	.02	.27	1.07	.39	.64	.27	1.46	1.33	.18	.18	.03	.02
IN.	.03	.31	1.23	.45	.67	.31	1.62	1.53	.20	.20	.03	.03

CAL YR 1982 TOTAL 193442.0 MEAN 530 MAX 5600 MIN 6.9 CFSM 1.17 IN 15.89
WTR YR 1983 TOTAL 80489.6 MEAN 221 MAX 3360 MIN 6.9 CFSM .49 IN 6.61

03323450 HUNTINGTON LAKE NEAR HUNTINGTON, IN

LOCATION.--Lat 40°50'45", long 85°28'07", in SW¼SW¼ sec.25, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, in operating pylon of dam of reservoir on Wabash River at State Highway 5, 1.5 miles southeast of Huntington, and at mile 411.4.

DRAINAGE AREA.--717 mi^2.

PERIOD OF RECORD.--January 1969 to current year. Prior to September 1970, published as Huntington "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete and rolled-earth fill dam which is State Highway 5. Releases normally controlled by six sluices, 6.0 ft wide and 6.0 ft high and spillway, crest elevation, 765 ft, with three taintor gates, 45 ft by 36.5 ft setting atop spillway. Minimum design capacity is 4,100 acre-ft, elevation, 737 ft. Seasonal pool capacity is 12,500 acre-ft, elevation, 749 ft. Capacity at flood control pool is 153,100 acre-ft, elevation, 798 ft. Reservoir is used for flood control and recreation. Reservoir put into operation on Jan. 9, 1969.

COOPERATION.--Water-stage recorder graph, dam tenders records, and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 115,900 acre-ft Mar. 25, 1978, elevation, 792.46 ft; minimum, 1,760 acre-ft Nov. 18, 1974, elevation, 731.27 ft, lowered reservoir for repairs.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,121 acre-ft May. 6, elevation, 768.68 ft; minimum, 4,110 acre-ft Feb. 8, elevation, 736.98 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	745.04	9,180	
Oct. 31	738.23	4,760	-4,420
Nov. 30	742.97	7,673	+2,913
Dec. 31	747.20	10,910	+3,237
CAL YR 1982			+6,608
Jan. 31	737.38	4,313	-6,597
Feb. 28	737.08	4,160	-153
Mar. 31	737.70	4,479	+319
Apr. 30	748.23	11,795	+7,316
May 31	749.12	12,589	+794
June 30	751.68	15,032	+2,443
July 31	748.96	12,444	-2,588
Aug. 31	749.18	12,643	+199
Sept. 30	745.54	9,565	-3,078
WTR YR 1983			+385

03323500 WABASH RIVER AT HUNTINGTON, IN

LOCATION.--Lat 40°51'20", long 85°29'53", in SW¼NE¼ sec.27, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on right bank at the Huntington Water and Light Plant, 2 miles south of Huntington, 2.4 miles downstream from Huntington Lake, 3.2 miles upstream from Little River, and at mile 409.0.

DRAINAGE AREA.--721 mi^2.

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1909: 1959. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 700.04 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). July 5, 1951, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to July 5, 1951, nonrecording gage at same site and datum.

REMARKS.--Flow regulated by Huntington Lake (See sta 03323450). Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--32 years, 602 ft^3/s, 11.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft^3/s Feb. 10, 1959; maximum gage height, 23.20 ft Feb. 10, 1959 (backwater from ice); minimum daily discharge, 2.4 ft^3/s Oct. 28, 29, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.7 ft, from high-water mark by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,910 ft^3/s Dec. 30; minimum daily discharge, 21 ft^3/s June 17-19, July 26-29, Aug. 1, 2, 9-12, 14-31, Sept. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	27	1040	3460	214	74	217	642	201	1200	21	21
2	24	28	789	1580	254	77	547	893	147	908	21	21
3	24	29	492	935	1010	110	942	1340	129	386	36	21
4	25	30	641	326	1870	116	1060	1700	147	283	56	21
5	24	30	909	215	1730	115	1620	2930	153	232	61	21
6	197	31	975	192	743	101	1750	3320	188	439	61	48
7	297	31	1350	90	395	79	1690	3260	209	337	49	61
8	289	31	1420	150	246	80	1670	3180	212	175	28	61
9	275	31	632	199	225	87	1670	3060	218	125	21	61
10	261	31	247	198	231	87	1490	2910	252	98	21	274
11	246	32	176	177	215	87	1590	1600	264	83	21	390
12	99	32	143	168	227	87	1680	781	232	83	21	57
13	32	32	121	167	236	87	1910	516	194	83	156	57
14	28	32	117	145	165	87	2030	326	77	77	21	57
15	28	79	127	149	159	76	2070	301	22	70	21	57
16	28	101	257	167	219	67	2100	330	142	61	21	56
17	27	98	785	167	297	69	2120	305	21	48	21	56
18	27	96	1010	128	381	68	2080	264	21	63	21	56
19	27	74	966	107	457	65	1360	242	21	75	21	56
20	27	93	674	148	427	70	464	238	22	75	21	56
21	27	108	394	167	300	72	349	214	117	47	21	56
22	27	111	361	168	222	167	278	328	187	35	21	55
23	27	114	257	212	225	477	234	652	292	35	21	55
24	27	367	224	240	197	418	234	645	219	35	21	55
25	27	523	846	296	171	249	234	550	124	26	21	55
26	27	529	1030	401	141	238	206	316	47	21	21	55
27	27	493	1890	295	124	253	116	238	36	21	21	55
28	27	401	3210	227	121	370	66	254	76	21	21	55
29	27	674	3820	198	---	559	195	232	428	21	21	54
30	27	993	3910	199	---	417	313	201	918	89	21	54
31	27	---	3680	214	---	255	---	201	---	111	21	---
TOTAL	2311	5281	32493	11485	11202	5164	32285	31969	5316	5363	951	2057
MEAN	74.5	176	1048	370	400	167	1076	1031	177	173	30.7	68.6
MAX	297	993	3910	3460	1870	559	2120	3320	918	1200	156	390
MIN	24	27	117	90	121	65	66	201	21	21	21	21
CFSM	.10	.24	1.45	.51	.56	.23	1.49	1.43	.25	.24	.04	.10
IN.	.12	.27	1.68	.59	.58	.27	1.67	1.65	.27	.28	.05	.11

CAL YR 1982 TOTAL 314871 MEAN 863 MAX 6230 MIN 20 CFSM 1.20 IN 16.25
WTR YR 1983 TOTAL 145877 MEAN 400 MAX 3910 MIN 21 CFSM .56 IN 7.53

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE¼NW¼ sec.9, T.28 N., R.10 E., Huntington County, Hydrologic Unit 05120101, on right bank on upstream side of highway bridge, 5 miles east of Huntington, and at mile 7.5.

DRAINAGE AREA.--263 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Prior to January 1944 monthly discharge only, published in WSP 1305. Published as Little River at Huntington, January 1944 to September 1948, Little River near Huntington, October 1948 to September 1956, and Little Wabash River near Huntington, October 1956 to September 1961.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 728.10 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, nonrecording gage 4 miles downstream at datum 8.79 ft lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good. During periods of extreme high water in St. Marys River, some water leaves the St. Marys River basin through Junk ditch and flows into Little River basin via Graham McCulloch ditch.

AVERAGE DISCHARGE.--40 years, 225 ft^3/s, 11.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft^3/s Jan. 4, 1950; maximum gage height, 19.39 ft Mar. 14, 1982; minimum daily discharge, 1.1 ft^3/s Oct. 8, 1946, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 26	0200	2850	13.17	May 2	2300	*3620	*15.00
Apr. 2	2000	2990	13.51				

Minimum daily discharge, 14 ft^3/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	68	261	238	126	68	211	1080	82	43	33	16
2	18	1290	282	192	387	67	1680	3530	74	96	26	16
3	17	1110	492	161	974	64	2760	3320	72	70	20	15
4	16	496	1580	135	400	63	1550	2100	86	47	20	15
5	16	258	1690	125	200	63	735	969	80	54	35	15
6	15	146	1300	116	170	62	535	535	585	40	33	15
7	17	99	592	116	130	65	674	359	450	33	23	18
8	18	77	348	104	110	71	583	277	208	29	20	18
9	17	61	247	70	97	71	888	201	137	28	18	17
10	19	50	197	67	86	67	1470	167	107	27	17	16
11	18	46	167	65	80	62	1080	147	89	25	22	15
12	17	74	138	63	74	60	743	131	78	24	20	15
13	18	147	145	64	70	57	596	118	72	23	18	15
14	18	88	115	66	68	55	2100	111	66	22	18	14
15	18	74	90	77	70	54	1460	115	62	22	18	16
16	20	52	1100	73	80	51	618	103	59	22	17	17
17	20	43	613	70	137	49	435	87	56	24	18	16
18	19	44	324	67	190	48	333	80	49	27	21	16
19	19	39	255	65	204	55	260	84	46	23	18	16
20	19	109	226	63	201	60	211	115	44	21	17	17
21	18	220	179	64	180	61	181	88	41	21	16	25
22	17	220	146	66	154	67	157	794	39	20	16	24
23	17	171	152	118	133	71	140	872	36	20	15	18
24	18	374	554	157	118	73	128	343	35	20	15	15
25	18	204	1930	122	99	78	118	217	33	19	15	15
26	17	135	2670	98	82	81	107	168	31	20	15	15
27	18	163	1630	88	70	340	100	132	30	19	16	15
28	18	528	1880	77	68	1260	113	113	36	19	16	15
29	18	971	1080	76	---	654	124	110	44	18	15	15
30	20	433	494	95	---	360	501	105	41	18	15	15
31	28	---	316	152	---	262	---	93	---	21	15	---
TOTAL	564	7790	21193	3110	4758	4519	20591	16664	2868	915	601	490
MEAN	18.2	260	684	100	170	146	686	538	95.6	29.5	19.4	16.3
MAX	28	1290	2670	238	974	1260	2760	3530	585	96	35	25
MIN	15	39	90	63	68	48	100	80	30	18	15	14
CFSM	.07	.99	2.60	.38	.65	.56	2.61	2.05	.36	.11	.07	.06
IN.	.08	1.10	3.00	.44	.67	.64	2.91	2.36	.41	.13	.09	.07

CAL YR 1982 TOTAL 152378 MEAN 417 MAX 5610 MIN 15 CFSM 1.59 IN 21.55
WTR YR 1983 TOTAL 84063 MEAN 230 MAX 3530 MIN 14 CFSM .88 IN 11.89

03324200 SALAMONIE RIVER AT PORTLAND, IN

LOCATION.--Lat 40°25'40", long 85°02'20", in NE¼SE¼ sec.23, T.23 N., R.13 E., Jay County, Hydrologic Unit 05120102, on right bank at downstream side of county road bridge, 2.3 miles downstream from Butternut Creek, 3.2 miles west of Portland, 3.7 miles downstream from Little Salamonie River, and at mile 70.5.

DRAINAGE AREA.--85.6 mi².

PERIOD OF RECORD.--September 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1960, nonrecording gage at site 1.4 miles upstream at datum 6.43 ft higher.

REMARKS.--Records good above 3.0 ft³/s and poor below. Natural flow partially affected by sewage effluent.

AVERAGE DISCHARGE.--24 years, 73.0 ft³/s, 11.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft³/s Mar. 5, 1963, gage height, 16.96 ft; minimum daily, 0.4 ft³/s Sept. 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1100	*1920	*12.12

Minimum daily discharge, 0.64 ft³/s Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	2.0	38	41	25	12	28	938	7.9	73	7.3	1.2
2	.75	7.0	26	34	291	12	280	1550	7.3	17	3.3	1.2
3	.71	6.0	21	29	367	11	292	496	7.3	8.2	2.5	1.2
4	.70	3.0	69	23	100	9.9	153	241	8.2	9.9	2.1	1.1
5	.70	2.3	108	21	45	9.9	101	119	7.3	39	1.9	1.1
6	.70	2.2	92	19	35	10	130	73	8.2	13	1.8	1.2
7	1.4	2.2	45	19	27	12	413	54	7.0	6.7	1.7	1.3
8	2.2	2.1	28	16	23	13	226	70	6.7	4.9	1.6	1.2
9	1.1	2.1	17	15	20	12	211	58	5.9	4.4	1.5	1.1
10	1.3	2.2	13	16	17	9.9	239	41	5.1	7.0	1.5	1.1
11	1.0	2.3	11	18	15	8.9	204	33	5.1	4.0	4.7	1.0
12	.90	9.6	9.5	15	13	8.2	151	28	4.7	3.8	3.1	1.0
13	.80	8.2	8.5	12	12	7.6	110	24	4.2	3.0	2.5	1.0
14	.78	4.4	9.0	12	14	7.9	792	22	4.0	2.8	2.0	1.0
15	.76	3.2	13	10	20	7.9	426	23	5.1	2.6	1.8	1.4
16	.73	2.9	269	8.0	56	7.3	150	21	4.4	2.5	2.0	2.0
17	.72	2.5	118	7.0	89	7.3	113	18	4.7	2.4	3.8	2.5
18	.72	2.3	54	6.0	63	8.5	83	14	5.1	2.7	4.0	1.8
19	.72	3.0	48	5.0	48	8.9	59	14	95	2.4	3.0	1.9
20	1.0	7.9	82	5.2	36	9.6	45	14	54	2.3	2.4	2.3
21	1.5	18	48	7.0	29	179	37	12	18	2.2	2.2	4.0
22	1.1	12	33	15	26	115	31	22	9.6	2.1	2.0	1.8
23	.90	23	33	43	25	60	28	47	7.0	2.0	1.9	1.6
24	.80	64	67	79	21	40	25	23	5.9	2.0	1.8	1.4
25	.75	30	182	60	18	37	30	18	5.4	5.4	1.7	1.3
26	.70	19	244	38	13	29	27	17	4.4	3.3	1.6	1.3
27	.68	33	285	20	11	38	16	13	4.0	2.8	1.5	1.2
28	.66	129	689	17	12	53	26	11	24	2.3	1.4	1.2
29	.65	190	253	19	---	44	35	9.9	12	2.0	1.4	1.2
30	.64	67	96	21	---	33	93	9.6	19	6.1	1.3	1.2
31	1.0	---	57	33	---	28	---	8.9	---	18	1.3	---
TOTAL	27.85	662.4	3066.0	683.2	1471	849.8	4554	4042.4	366.5	259.8	72.6	43.8
MEAN	.90	22.1	98.9	22.0	52.5	27.4	152	130	12.2	8.38	2.34	1.46
MAX	2.2	190	689	79	367	179	792	1550	95	73	7.3	4.0
MIN	.64	2.0	8.5	5.0	11	7.3	16	8.9	4.0	2.0	1.3	1.0
CFSM	.01	.26	1.16	.26	.61	.32	1.78	1.52	.14	.10	.03	.02
IN.	.01	.29	1.33	.30	.64	.37	1.98	1.76	.16	.11	.03	.02

CAL YR 1982 TOTAL 40617.70 MEAN 111 MAX 1980 MIN .64 CFSM 1.30 IN 17.65
WTR YR 1983 TOTAL 16099.35 MEAN 44.1 MAX 1550 MIN .64 CFSM .52 IN 7.00

03324300 SALAMONIE RIVER NEAR WARREN, IN

LOCATION.--Lat 40°42'45", long 85°27'13", in SE¼SE¼ sec.12, T.26 N., R.9 E., Huntington County, Hydrologic Unit 05120102, on right bank at downstream side of bridge on County Road 800 South, 0.4 mile downstream from Detamore ditch, 0.4 mile downstream from Interstate 69, 0.8 mile upstream from concrete and stone dam, 2.4 miles northwest of Warren, and at mile 30.0.

DRAINAGE AREA.--425 mi².

PERIOD OF RECORD.--March 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete and stone control. Datum of gage is 784.65 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 28, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good above 40 ft³/s and poor below.

AVERAGE DISCHARGE.--26 years, 384 ft³/s, 12.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft³/s Feb. 10, 1959, gage height, 17.05 ft; minimum daily, 5.1 ft³/s Jan. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0500	4480	11.10	May 2	1800	*5090	*11.60
Apr. 3	0600	3220	10.01				

Minimum daily discharge, 9.5 ft³/s Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	125	370	326	130	94	161	1180	76	113	60	10
2	17	285	262	256	320	94	1490	4670	66	161	83	10
3	16	214	285	219	1500	90	3010	4180	66	90	63	10
4	16	143	1190	184	700	87	1500	3320	69	57	37	10
5	16	105	1540	161	300	87	719	1200	66	57	30	10
6	18	83	1220	143	220	87	529	574	268	94	25	10
7	21	69	574	138	160	90	866	390	220	76	20	11
8	26	63	345	134	120	94	1410	308	110	50	17	10
9	33	57	240	121	115	90	850	268	80	43	15	9.9
10	25	57	189	117	110	87	1460	224	70	38	14	9.8
11	27	63	140	117	105	83	991	179	60	35	21	9.7
12	22	73	100	112	103	76	800	152	56	33	23	9.6
13	20	134	75	105	100	73	567	134	53	31	23	9.6
14	19	117	80	97	95	73	1720	125	51	29	19	9.5
15	18	97	121	90	100	73	2170	125	49	28	19	9.5
16	17	76	727	70	143	69	1140	117	48	27	24	11
17	16	63	893	65	320	66	536	105	46	32	28	14
18	16	60	417	58	364	73	423	94	45	38	28	13
19	15	57	279	58	291	76	308	113	338	35	30	12
20	17	73	314	60	234	80	240	199	194	31	25	15
21	18	184	296	62	189	130	203	125	148	27	21	16
22	17	370	219	69	161	500	175	351	80	24	19	13
23	16	314	194	83	152	345	161	478	57	23	17	12
24	15	627	672	113	138	262	148	273	45	23	16	12
25	14	396	2810	189	125	214	134	184	37	30	15	12
26	14	245	4000	150	109	179	117	184	35	25	14	12
27	13	332	1990	110	97	184	109	148	33	22	13	11
28	13	711	2810	80	94	308	117	117	66	21	13	11
29	13	1290	2130	95	---	332	130	105	130	21	12	11
30	13	695	850	120	---	234	410	94	101	35	11	10
31	16	---	471	130	---	184	---	87	---	54	11	---
TOTAL	554	7178	25803	3832	6595	4514	22594	19803	2763	1403	766	333.6
MEAN	17.9	239	832	124	236	146	753	639	92.1	45.3	24.7	11.1
MAX	33	1290	4000	326	1500	500	3010	4670	338	161	83	16
MIN	13	57	75	58	94	66	109	87	33	21	11	9.5
CFSM	.04	.56	1.96	.29	.56	.34	1.77	1.50	.22	.11	.06	.03
IN.	.05	.63	2.26	.34	.58	.40	1.98	1.73	.24	.12	.07	.03

CAL YR 1982 TOTAL 197737.0 MEAN 542 MAX 8840 MIN 13 CFSM 1.28 IN 17.31
WTR YR 1983 TOTAL 96138.6 MEAN 263 MAX 4670 MIN 9.5 CFSM .62 IN 8.41

BEST COPY AVAILABLE

03324450 SALAMONIE LAKE AT DORA, IN

LOCATION.--Lat 40°48'25", long 85°40'38", in SW¼NW¼ sec.7, T.27 N., R.8 E., Wabash County, Hydrologic Unit 05120102, in discharge tower of reservoir on Salamonie River, 1.1 miles northwest of Dora, and 3.4 miles upstream from mouth.

DRAINAGE AREA.--553 mi².

PERIOD OF RECORD.--April 1967 to current year. Prior to September 1970, published as Salamonie "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4.75 ft wide and 16.0 ft high, in semi-elliptical conduit through dam. Minimum design capacity is 13,100 acre-ft, elevation, 730 ft. Seasonal pool capacity is 60,700 acre-ft, elevation, 755 ft. Capacity at uncontrolled spillway elevation, 793 ft, is 263,000 acre-ft. Reservoir is used for flood control and recreation. Reservoir put in operation on Apr. 17, 1967.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 212,976 acre-ft Mar. 23, 1982, elevation, 786.91 ft; minimum, 10,000 acre-ft Mar. 11, 1969, elevation, 726.44 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 100,866 acre-ft May 11, elevation, 766.63 ft; minimum, 13,105 acre-ft Jan. 17, elevation, 730.00 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	754.77	60,040	
Oct. 31	747.83	42,463	-17,577
Nov. 30	735.64	19,719	-22,744
Dec. 31	750.42	48,571	+28,852
CAL YR 1982			+34,881
Jan. 31	730.13	13,232	-35,339
Feb. 28	730.17	13,271	+39
Mar. 31	737.93	23,154	+9,883
Apr. 30	754.27	58,636	35,482
May 31	755.14	61,095	+2,459
June 30	755.35	61,700	+605
July 31	755.15	61,124	-576
Aug. 31	755.02	60,751	-373
Sept. 30	751.57	51,445	-9,306
WTR YR 1983			-8,595

03324500 SALAMONIE RIVER AT DORA, IN

LOCATION.--Lat 40°48'42", long 85°41'02", in NE¼NE¼ sec.12, T.27 N., R.7 E., Wabash County, Hydrologic Unit 05120102, on right bank, 0.4 mile downstream from Salamonie Lake, 1.5 miles northwest of Dora, and 3.0 miles upstream from mouth.

DRAINAGE AREA.--557 mi².

PERIOD OF RECORD.--November 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931(M), 1932, 1933(M), 1935-36(M), 1938-40(M), 1941-42, 1945, 1952. WSP 1335: 1934(M). WSP 1555: 1952, 1955-56(M), 1957. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 673.96 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Oct. 9, 1961, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1951, nonrecording gage at site 1.5 miles upstream at datum 688.59 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft upstream at datum 679.77 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Flow regulated by Salamonie Lake (See sta 03324450). Daily discharge computed from relation between discharge, head, and gate openings for Salamonie Lake beginning Oct. 1, 1974.

COOPERATION.-Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--59 years (1924 to current year), 511 ft³/s, 12.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s May 18, 1943, gage height, 14.75 ft, from graph based on gage readings, site and datum then in use; minimum daily, 0.70 ft³/s Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,960 ft³/s May 18; minimum daily, 13 ft³/s July 26-30, Aug. 1-15, 17-19, 21-31, Sept. 1,2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	24	1040	1700	148	124	21	382	96	295	13	13
2	26	24	1020	2330	228	124	22	220	70	295	13	13
3	26	24	994	2270	656	124	24	99	130	295	13	38
4	26	24	994	2750	1290	110	24	101	157	176	13	48
5	26	24	1030	2660	1070	105	250	101	157	55	13	48
6	444	24	762	2520	633	104	422	102	212	26	13	193
7	689	24	1100	2200	456	105	424	102	95	26	13	280
8	685	24	1620	967	134	105	429	102	96	26	13	286
9	681	24	1280	491	143	105	435	102	136	26	13	428
10	694	24	1230	183	137	105	439	102	183	26	13	642
11	698	24	979	166	142	105	664	685	249	26	13	404
12	350	596	472	157	159	105	925	1870	271	26	13	47
13	177	967	348	157	159	105	962	1990	148	26	13	47
14	177	957	279	156	161	72	948	1970	47	26	13	47
15	530	1010	256	156	177	18	964	1950	213	26	13	47
16	799	1010	478	137	184	18	975	2250	509	26	38	47
17	792	994	793	113	210	18	976	2850	506	26	13	47
18	347	976	941	71	313	18	974	2960	215	26	13	47
19	174	1000	726	86	359	18	971	2900	95	26	13	47
20	174	1000	399	104	437	18	966	2840	95	26	17	47
21	720	1010	410	104	416	19	961	1780	95	26	13	47
22	984	1010	394	104	260	19	956	1170	95	26	13	47
23	974	991	218	104	208	19	712	1170	95	26	13	144
24	561	1000	330	105	201	19	314	1020	95	26	13	306
25	73	1000	434	157	170	20	199	455	95	17	13	316
26	24	986	283	183	131	20	153	244	95	13	13	316
27	24	992	166	238	104	20	153	244	95	13	13	315
28	24	1020	171	143	112	20	153	244	95	13	13	314
29	24	1040	448	87	---	21	182	208	95	13	13	313
30	24	1050	1240	157	---	21	197	157	207	13	13	312
31	24	---	1720	183	---	21	---	157	---	111	13	---
TOTAL	10997	18873	22555	20939	8798	1825	15795	30527	4742	1803	432	5246
MEAN	355	629	728	675	314	58.9	527	985	158	58.2	13.9	175
MAX	984	1050	1720	2750	1290	124	976	2960	509	295	38	642
MIN	24	24	166	71	104	18	21	99	47	13	13	13
CFSM	.64	1.13	1.31	1.21	.56	.11	.95	1.77	.28	.10	.03	.31
IN.	.73	1.26	1.51	1.40	.59	.12	1.05	2.04	.32	.12	.03	.35

CAL YR 1982 TOTAL 279979 MEAN 767 MAX 6150 MIN 24 CFSM 1.38 IN 18.70
WTR YR 1983 TOTAL 142532 MEAN 390 MAX 2960 MIN 13 CFSM .70 IN 9.52

03325000 WABASH RIVER AT WABASH, IN

LOCATION.--Lat 40°47'25", long 85°49'13", in SE¼NW¼ sec.14, T.27 N., R.6 E., Wabash County, Hydrologic Unit 05120101, on right bank on upstream side of Wabash Street bridge in Wabash, 7.1 miles downstream from Salamonie River, and at mile 387.2.

DRAINAGE AREA.--1,768 mi².

PERIOD OF RECORD.--August 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-37(M), 1938-39, 1940(M). WSP 1385: 1942. WSP 1505: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good from October to March, fair thereafter. Flow regulated by Huntington Lake (See sta 03323450) and Salamonie Lake (See sta 03324450).

AVERAGE DISCHARGE.--60 years, 1,492 ft³/s, 11.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft³/s May 18, 1943; maximum gage height, 24.44 ft Feb. 11, 1959 (ice jam); minimum daily discharge, 19 ft³/s July 21, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.7 ft Mar. 26, 1913, from floodmark, determined by Corps of Engineers, discharge, 90,000 ft³/s, from rating curve extended above 49,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,950 ft³/s Apr. 14, gage height, 12.32 ft; minimum daily, 50 ft³/s Sept. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	217	2820	5310	749	465	805	3880	504	1420	130	50
2	81	1680	2850	4270	1120	356	4070	6760	372	1480	72	50
3	70	2390	3060	3830	2910	356	6310	6140	399	1080	69	56
4	68	1260	4750	3760	3840	399	4250	4530	484	553	70	69
5	69	719	5360	3320	3770	395	3340	4630	504	315	88	70
6	244	453	4850	3210	2270	395	3120	4880	1060	251	100	163
7	888	337	3520	3050	1560	392	3250	4540	1200	574	95	296
8	941	283	3710	2540	999	369	3160	4190	704	305	84	362
9	945	251	3170	1240	641	385	4050	3890	628	236	75	337
10	933	220	2250	694	709	378	4440	3680	689	214	69	831
11	933	166	1960	689	709	365	4000	3270	728	166	65	1090
12	704	422	1160	624	655	359	3860	2880	724	150	68	262
13	242	1180	719	599	660	356	3660	2820	586	145	75	138
14	198	1160	664	586	650	346	7080	2680	330	143	173	132
15	378	1130	689	516	557	259	6060	2500	318	140	63	130
16	749	1230	2260	496	624	242	4140	2450	655	126	58	130
17	805	1300	2710	480	884	198	3810	3410	724	115	68	128
18	646	1310	2700	403	1170	236	3810	3730	333	113	64	128
19	195	1310	2430	346	1330	239	3430	3660	178	134	61	128
20	195	1350	1790	422	1440	228	2050	3610	159	154	60	140
21	488	1510	1490	457	1320	280	1720	2220	217	98	59	152
22	900	1570	1350	465	1000	290	1720	1800	283	82	55	138
23	895	1610	1100	496	795	612	1540	4020	375	80	54	196
24	719	2040	1170	664	810	922	1070	2500	403	79	55	346
25	134	2140	4170	704	641	637	852	1260	343	79	54	346
26	72	2050	6230	863	574	549	724	1070	330	72	52	399
27	107	2030	4140	999	433	1320	620	800	268	69	52	411
28	136	2310	6370	749	430	2990	628	739	190	65	53	407
29	152	3560	6140	496	---	2070	1100	699	646	65	54	403
30	150	3100	5860	616	---	1480	1250	616	1060	63	52	399
31	163	---	6040	831	---	1020	---	582	---	124	52	---
TOTAL	13295	40288	97482	43725	33250	18888	89919	94436	15394	8690	2199	7887
MEAN	429	1343	3145	1410	1188	609	2997	3046	513	280	70.9	263
MAX	945	3560	6370	5310	3840	2990	7080	6760	1200	1480	173	1090
MIN	68	166	664	346	430	198	620	582	159	63	52	50
CFSM	.24	.76	1.78	.80	.67	.34	1.70	1.72	.29	.16	.04	.15
IN.	.28	.85	2.05	.92	.70	.40	1.89	1.99	.32	.18	.05	.17

CAL YR 1982 TOTAL 851913 MEAN 2334 MAX 14000 MIN 68 CFSM 1.32 IN 17.92
WTR YR 1983 TOTAL 465453 MEAN 1275 MAX 7080 MIN 50 CFSM .72 IN 9.79

03325311 LITTLE MISSISSINEWA RIVER AT UNION CITY, IN

LOCATION.--Lat 40°11'46", long 84°49'45", in SE¼NW¼ sec.26, T.18 N., R.1 W., Randolph County, Hydrologic Unit 05120103, on right bank, 85 ft downstream from Westinghouse Road, 0.5 mile downstream from Little ditch, 0.8 mile upstream from City Drain, and 1.2 miles west of the Post Office in Union City.

DRAINAGE AREA.--9.67 mi².

PERIOD OF RECORD.--October 1982 to September 1983.

GAGE.--Water-stage recorder. Datum of gage is 1075.50 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100 ft³/s May 2, 1983 gage height, 4.96 ft; no flow for many days in 1983.

EXTREMES FOR CUURRENT YEAR.--Peak discharge above base of 140 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	0615	*100	*4.96

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.05	1.3	7.4	3.4	1.9	2.7	51	2.6	2.4	.19	.00
2	.00	.11	.83	5.6	45	1.5	20	79	2.3	2.0	.07	.00
3	.00	.03	1.0	4.0	43	1.4	20	67	2.6	1.2	.04	.00
4	.00	.02	1.4	3.4	12	1.4	10	46	2.4	2.7	.05	.00
5	.00	.02	2.3	3.0	7.0	1.5	8.2	28	1.9	3.4	.06	.00
6	.00	.00	2.7	2.9	5.0	1.6	7.6	18	2.0	1.5	.04	.00
7	.07	.00	1.6	2.6	4.0	1.6	55	15	1.7	1.1	.03	.00
8	.23	.02	1.2	1.6	3.5	1.5	33	27	1.6	.92	.02	.00
9	.16	.02	.92	1.9	2.9	1.3	22	16	1.4	.88	.00	.00
10	.11	.02	1.0	2.1	2.7	1.1	18	12	1.3	.81	.00	.00
11	.04	.03	.69	1.9	2.4	1.0	24	9.6	1.3	.66	.04	.00
12	.03	.83	.45	1.1	1.9	.92	20	8.7	1.3	.56	.07	.00
13	.02	.05	.42	1.1	1.5	.92	18	7.6	1.3	.46	.02	.00
14	.02	.00	.45	1.3	1.7	1.0	76	7.1	1.3	.38	.00	.00
15	.02	.00	2.1	1.0	2.5	.76	57	6.3	1.5	.34	.00	.00
16	.02	.00	14	.70	4.5	.69	35	5.2	1.4	.28	.00	.00
17	.02	.02	7.4	.45	4.6	.83	24	4.6	1.3	.26	.00	.00
18	.02	.02	4.8	.40	4.0	1.0	17	4.4	1.3	.25	.00	.00
19	.02	.02	4.2	.35	3.8	.92	12	5.0	2.3	.22	.01	.00
20	.03	.05	4.2	.35	2.9	1.3	9.3	4.0	1.8	.18	.00	.00
21	.04	.30	2.9	.40	2.9	26	7.9	4.0	1.4	.13	.00	.00
22	.02	.16	2.6	2.0	3.4	11	6.8	20	1.2	.10	.00	.00
23	.02	2.1	3.0	5.9	3.0	6.6	6.6	12	1.1	.10	.00	.00
24	.02	1.1	3.4	5.6	2.7	5.4	5.9	7.4	1.1	.28	.00	.00
25	.02	.35	6.1	3.8	2.1	4.0	5.2	6.6	1.0	.27	.00	.00
26	.02	.39	9.6	2.9	1.6	3.6	4.6	5.2	.97	.22	.00	.00
27	.03	.39	52	2.3	1.5	4.2	4.8	4.4	.98	.13	.00	.00
28	.02	5.2	58	2.1	1.9	3.0	5.4	4.2	1.2	.07	.00	.00
29	.02	4.6	31	2.0	---	2.0	4.8	4.2	1.0	.06	.00	.00
30	.03	2.1	15	4.0	---	2.1	17	3.6	1.9	.05	.00	.00
31	.04	---	10	3.6	---	2.6	---	3.1	---	.11	.00	---
TOTAL	1.09	18.00	246.56	77.75	177.4	94.64	557.8	496.2	46.45	22.02	.64	.00
MEAN	.035	.60	7.95	2.51	6.34	3.05	18.6	16.0	1.55	.71	.021	.000
MAX	.23	5.2	58	7.4	45	26	76	79	2.6	3.4	.19	.00
MIN	.00	.00	.42	.35	1.5	.69	2.7	3.1	.97	.05	.00	.00
CFSM	.004	.06	.82	.26	.66	.32	1.92	1.66	.16	.07	.002	.000
IN.	.00	.07	.95	.30	.68	.36	2.15	1.91	.18	.08	.00	.00

WTR YR 1983 TOTAL 1738.55 MEAN 4.76 MAX 79 MIN .00 CFSM .49 IN 6.69

03325500 MISSISSINEWA RIVER NEAR RIDGEVILLE, IN

LOCATION.--Lat 40°16'49", long 84°59'44", in SE¼SE¼ sec.7, T.21 N., R.14 E., Randolph County, Hydrologic Unit 05120103, on right bank 30 ft downstream from highway bridge, 0.8 mile downstream from Mud Creek, 2 miles east of Ridgeville, and at mile 99.5.

DRAINAGE AREA.--133 mi².

PERIOD OF RECORD.--August 1946 to current year.

REVISED RECORDS.--WSP 1235: 1948. WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 965.28 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good above 150 ft³/s and fair below, thru May. Records poor from June thru September due to new bridge construction.

AVERAGE DISCHARGE.--37 years, 126 ft³/s, 12.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s June 10, 1958, gage height, 16.25 ft, from rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 ft³/s Oct. 24, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1100	*2490	*11.35

Minimum daily discharge, 1.1 ft³/s Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	4.5	107	78	46	31	93	633	19	400	5.0	1.3
2	3.3	7.0	71	60	500	28	393	1840	15	259	3.5	1.3
3	3.1	14	65	45	540	25	430	928	17	112	3.1	1.2
4	3.1	6.4	202	34	200	24	282	494	21	192	2.9	1.2
5	3.3	5.0	250	32	95	23	225	297	14	271	2.7	1.2
6	3.9	5.0	138	28	75	26	240	188	16	103	2.4	1.2
7	4.5	5.3	55	30	60	29	832	137	15	64	2.2	2.6
8	8.0	5.3	32	20	50	29	432	302	12	50	1.9	2.9
9	4.5	5.0	24	19	42	27	340	185	11	40	1.7	1.8
10	5.6	5.6	21	22	40	23	338	120	9.4	33	1.7	1.4
11	3.5	5.8	18	23	35	21	342	89	8.7	24	2.6	1.3
12	3.1	7.3	14	17	27	19	282	69	8.3	18	3.6	1.2
13	3.0	13	11	15	22	18	238	57	8.0	14	2.3	1.1
14	2.9	6.4	12	15	25	19	1020	49	8.0	10	1.7	1.1
15	2.8	5.3	32	16	35	19	617	50	9.8	8.8	1.7	2.0
16	2.7	5.0	480	11	70	15	321	42	13	7.1	1.6	1.5
17	2.6	5.3	189	7.0	119	15	252	28	9.4	5.5	1.9	1.4
18	2.6	5.6	90	6.0	88	21	190	22	25	5.3	3.0	1.3
19	2.6	5.6	118	5.0	73	27	141	29	402	5.8	2.2	1.2
20	4.8	6.7	158	5.0	53	23	110	26	161	3.9	1.8	1.2
21	5.6	13	78	6.0	46	343	90	17	60	3.1	1.7	4.0
22	4.0	16	53	15	58	286	74	239	29	2.2	1.6	3.8
23	3.3	38	64	115	59	192	68	218	16	2.0	1.7	2.9
24	2.9	90	91	153	48	160	63	92	11	9.1	1.6	2.5
25	2.7	17	209	94	40	127	50	73	7.7	7.5	1.5	2.2
26	2.6	10	259	58	27	103	44	77	5.8	6.0	1.5	1.9
27	3.5	29	640	43	24	121	41	48	37	3.5	1.4	1.8
28	2.9	209	838	34	28	140	95	40	213	2.2	1.4	1.7
29	2.5	388	345	29	---	117	82	40	249	1.8	1.4	1.6
30	2.4	198	173	53	---	93	167	31	382	1.5	1.3	1.5
31	3.5	---	111	64	---	97	---	27	---	4.5	1.3	---
TOTAL	108.9	1137.1	4948	1152.0	2525	2241	7892	6487	1813.1	1669.8	65.9	53.3
MEAN	3.51	37.9	160	37.2	90.2	72.3	263	209	60.4	53.9	2.13	1.78
MAX	8.0	388	838	153	540	343	1020	1840	402	400	5.0	4.0
MIN	2.4	4.5	11	5.0	22	15	41	17	5.8	1.5	1.3	1.1
CFSM	.03	.29	1.20	.28	.68	.54	1.98	1.57	.45	.41	.02	.01
IN.	.03	.32	1.38	.32	.71	.63	2.21	1.81	.51	.47	.02	.01

CAL YR 1982 TOTAL 61903.2 MEAN 170 MAX 2000 MIN 2.4 CFSM 1.28 IN 17.31
WTR YR 1983 TOTAL 30093.1 MEAN 82.4 MAX 1840 MIN 1.1 CFSM .62 IN 8.42

03326070 BIG LICK CREEK NEAR HARTFORD CITY, IN

LOCATION.--Lat 40°25'20", long 85°21'04", in SE¼SE¼ sec.23, T.23 N., R.10 E., Blackford County, Hydrologic Unit 05120103, on right bank, 6 ft downstream from bridge on County Road 100 East and 2.0 miles southeast of Hartford City.

DRAINAGE AREA.--29.2 mi^2.

PERIOD OF RECORD.--July 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 5 ft^3/s, which are fair.

AVERAGE DISCHARGE.--12 years, 27.6 ft^3/s, 12.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1940 ft^3/s June 6, 1981, gage height, 16.14 ft; minimum daily, 0.32 ft^3/s Aug. 25, Sept. 10, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	0900	*489	*11.00

Minimum daily discharge, 0.32 ft^3/s Aug. 25, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	1.1	5.1	15	7.3	4.1	8.0	100	2.9	3.8	5.6	.85
2	.75	1.5	3.9	12	94	3.7	156	366	2.7	1.9	1.5	.86
3	.75	4.4	5.4	10	118	3.4	168	162	2.9	1.4	1.4	.58
4	.80	1.8	57	8.2	36	3.3	77	87	3.4	1.7	1.6	.53
5	.77	1.1	74	7.3	22	3.2	50	43	2.8	5.0	1.2	.44
6	.80	1.1	44	6.7	12	3.7	58	25	3.2	1.9	.97	.35
7	1.1	1.1	12	7.0	10	4.1	145	17	3.2	1.6	.70	.36
8	1.2	.89	6.3	5.9	8.2	4.5	80	17	2.2	1.5	.55	.71
9	.90	.89	4.2	5.5	7.3	3.7	131	13	1.4	.96	.71	.48
10	1.1	.95	3.4	6.1	6.6	3.3	131	11	1.9	.80	1.1	.32
11	1.0	1.0	3.7	6.4	6.0	3.1	107	9.5	1.8	1.4	1.5	.35
12	.96	1.7	2.7	5.2	5.5	2.8	62	8.6	1.6	1.4	2.5	.41
13	.93	4.1	2.1	4.5	5.2	2.8	44	7.8	1.5	1.3	1.1	.38
14	.91	1.5	2.0	4.4	5.0	3.0	195	7.4	2.2	1.3	.82	.55
15	.90	1.2	4.5	4.3	7.8	2.8	100	7.0	2.2	1.9	.77	.72
16	.98	1.1	56	3.5	24	2.6	39	6.2	1.8	1.6	.61	.78
17	.92	1.0	26	2.9	34	2.7	34	4.9	2.0	.66	.92	.90
18	.88	.97	18	2.6	23	3.3	24	4.3	2.1	.76	2.0	.91
19	.86	.95	19	2.4	17	4.0	17	4.8	2.7	1.3	1.0	.73
20	.93	1.4	25	2.3	13	4.0	14	4.9	2.6	1.3	.83	.78
21	1.1	2.4	15	2.7	9.9	69	12	4.0	2.3	1.3	.69	1.4
22	.94	3.9	11	3.8	9.0	42	11	9.5	1.9	1.6	.59	1.1
23	.90	3.7	13	8.1	8.1	20	9.9	8.3	1.7	2.1	.67	.49
24	.88	8.1	93	12	6.7	15	8.9	5.1	1.5	1.3	.61	.46
25	.87	2.0	241	9.9	5.5	10	7.6	4.6	2.1	1.9	.32	.46
26	.91	1.7	167	7.3	4.3	8.0	6.7	5.2	2.6	2.8	.39	.63
27	.96	13	141	5.8	3.8	9.1	6.2	3.7	1.9	1.3	.52	.51
28	.92	34	205	5.1	4.1	16	9.6	3.4	1.9	.91	.59	.44
29	.89	27	77	4.7	---	15	9.9	3.7	2.3	.73	.55	.41
30	.87	9.1	34	7.8	---	10	13	3.4	2.3	.70	.53	.39
31	.94	---	21	9.7	---	8.6	---	3.2	---	1.8	.67	---
TOTAL	28.41	134.65	1392.3	199.1	513.3	290.8	1734.8	960.5	67.6	49.92	33.51	18.28
MEAN	.92	4.49	44.9	6.42	18.3	9.38	57.8	31.0	2.25	1.61	1.08	.61
MAX	1.2	34	241	15	118	69	195	366	3.4	5.0	5.6	1.4
MIN	.75	.89	2.0	2.3	3.8	2.6	6.2	3.2	1.4	.66	.32	.32
CFSM	.03	.15	1.54	.22	.63	.32	1.98	1.06	.08	.05	.04	.02
IN.	.04	.17	1.77	.25	.65	.37	2.21	1.22	.09	.06	.04	.02

CAL YR 1982 TOTAL 13227.26 MEAN 36.2 MAX 841 MIN .71 CFSM 1.24 IN 16.85
WTR YR 1983 TOTAL 5423.17 MEAN 14.9 MAX 366 MIN .32 CFSM .51 IN 6.91

03326500 MISSISSINEWA RIVER AT MARION, IN

LOCATION.--Lat 40°34'34", long 85°39'34", in SE¼NE¼ sec.31, T.25 N., R.8 E., Grant County, Hydrologic Unit 05120103, on left bank 12 ft downstream from Highland Avenue bridge in Marion, 0.1 mile downstream from old mill dam, 1.0 mile upstream from Hummel Creek, 4.6 miles downstream from Lugar Creek, and at mile 35.8.

DRAINAGE AREA.--682 mi².

PERIOD OF RECORD.--September 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1927(M). WSP 1385: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 774.56 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow periodically regulated by dam above station.

AVERAGE DISCHARGE.--60 years, 626 ft³/s, 12.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s Mar. 21, 1927, gage height, 17.40 ft from graph based on gage readings, from rating curve extended above 18,000 ft³/s; minimum daily, 3.4 ft³/s Oct. 25, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.20 ft from information by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1400	*7160	*9.04

Minimum daily discharge, 14 ft³/s Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	158	432	778	282	180	310	1260	217	345	79	36
2	66	125	309	606	800	179	1300	6140	200	831	70	36
3	66	107	340	498	1920	176	2620	5480	194	410	68	34
4	63	87	1020	414	1940	173	2100	3830	191	264	70	35
5	59	81	1280	361	960	167	1300	2030	189	223	68	36
6	57	72	1100	323	613	169	990	1180	430	433	64	35
7	68	70	690	302	491	187	1230	838	284	271	60	41
8	62	74	473	280	390	183	2210	670	223	184	56	36
9	61	70	343	263	343	175	1910	642	143	148	55	35
10	65	68	275	252	301	168	2050	576	82	133	51	35
11	59	71	244	248	275	161	1760	461	156	119	65	35
12	67	96	213	243	255	153	1530	402	152	110	58	36
13	61	93	184	225	231	146	1260	364	144	105	57	35
14	63	93	170	212	220	143	2140	338	140	100	54	35
15	45	81	183	204	219	141	2890	327	135	96	50	34
16	15	76	564	190	274	137	2610	306	133	91	48	34
17	14	71	919	185	438	134	1420	284	128	91	52	36
18	84	75	795	165	524	142	1010	263	164	95	55	35
19	58	76	514	150	478	145	781	357	145	117	55	35
20	59	95	427	155	404	158	617	350	363	94	53	38
21	60	135	436	160	340	364	510	263	452	86	51	55
22	59	148	396	165	300	915	442	692	265	79	46	43
23	59	172	321	178	282	842	394	757	193	75	45	41
24	58	280	498	202	265	570	361	647	157	74	44	41
25	59	211	2010	323	244	443	330	360	137	74	43	39
26	58	239	3840	353	216	366	299	399	125	73	43	39
27	56	254	2500	283	195	342	274	325	115	74	43	38
28	60	528	3330	230	184	396	313	297	111	71	41	38
29	58	648	3020	207	---	397	328	268	121	71	41	39
30	58	652	2040	241	---	364	691	245	422	71	40	41
31	83	---	1130	256	---	318	---	229	---	83	38	---
TOTAL	1825	5006	29996	8652	13384	8534	35980	30580	5911	5091	1663	1126
MEAN	58.9	167	968	279	478	275	1199	986	197	164	53.6	37.5
MAX	84	652	3840	778	1940	915	2890	6140	452	831	79	55
MIN	14	68	170	150	184	134	274	229	82	71	38	34
CFSM	.09	.25	1.42	.41	.70	.40	1.76	1.45	.29	.24	.08	.06
IN.	.10	.27	1.64	.47	.73	.47	1.96	1.67	.32	.28	.09	.06

CAL YR 1982 TOTAL 280439 MEAN 768 MAX 11400 MIN 14 CFSM 1.13 IN 15.30
WTR YR 1983 TOTAL 147748 MEAN 405 MAX 6140 MIN 14 CFSM .59 IN 8.06

03326950 MISSISSINEWA LAKE AT PEORIA, IN

LOCATION.--Lat 40°42'52", long 85°57'27", in NW¼SW¼ sec.10, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, in discharge tower of reservoir on Mississinewa River at Peoria, 6.8 miles southeast of Peru, and 7.3 miles above mouth.

DRAINAGE AREA.--807 mi².

PERIOD OF RECORD.--April 1968 to current year. Prior to September 1970, published as Mississinewa "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4.75 ft wide and 16.0 ft high, in semi-elliptical conduit through dam. Minimum design capacity is 23,300 acre-ft, elevation, 712 ft. Seasonal pool capacity is 75,200 acre-ft, elevation, 737 ft. Capacity at uncontrolled spillway elevation, 779 ft, is 368,400 acre-ft. Reservoir is used for flood control and recreation. Reservoir put in operation on April 23, 1968.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 282,331 acre-ft Mar. 22, 1982, elevation, 771.48 ft; minimum, 13,964 acre-ft Jan. 20, 1983, elevation, 703.30 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 123,758 acre-ft May 7, elevation, 749.10 ft; minimum, 13,964 acre-ft Jan. 20, elevation, 703.30 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	735.93	71,853	
Oct. 31	729.04	53,475	-18,378
Nov. 30	714.56	26,732	-26,743
Dec. 31	728.08	51,251	+24,519
CAL YR 1982			+26,493
Jan. 31	708.67	19,061	-32,190
Feb. 28	711.98	23,264	+4,203
Mar. 31	721.35	37,565	+14,301
Apr. 30	736.57	73,828	36,263
May 31	737.08	75,439	+1,611
June 30	737.23	75,919	+480
July 31	737.23	75,919	0
Aug. 31	737.05	75,343	-576
Sept. 30	736.50	73,609	-1,734
WTR YR 1983			-1,756

03327000 MISSISSINEWA RIVER AT PEORIA, IN

LOCATION.--Lat 40°43'24", long 85°57'27", in SW¼SW¼ sec.3, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, on right bank at Peoria, 0.6 mile downstream from Mississinewa Lake, 6.5 miles southeast of Peru, and 6.7 miles upstream from mouth.

DRAINAGE AREA.--808 mi².

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 660.00 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1962, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 7, 1954, nonrecording gage and crest-stage gage on highway bridge 2,500 ft upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft upstream at same datum.

REMARKS.--Flow regulated by Mississinewa Lake (See sta. 03326950). Daily discharge computed from relation between discharge, head, and gate openings for Mississinewa Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--31 years, 711 ft³/s, 11.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s June 11, 1958, gage height, 19.26 ft, site then in use; minimum daily, 6.1 ft³/s Oct. 3, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,040 ft³/s Jan. 1; minimum daily, 19 ft³/s Mar. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	485	602	3040	55	209	42	110	211	208	47	47
2	240	623	1070	3000	56	180	43	115	211	890	47	47
3	267	811	1010	2960	635	181	46	122	261	691	47	47
4	267	774	946	2900	1360	214	48	126	281	344	47	47
5	267	631	529	2850	1500	234	50	599	261	288	60	47
6	267	569	325	2090	1180	234	420	1210	262	222	82	76
7	266	566	641	639	626	234	606	1210	501	203	89	123
8	266	564	1170	363	453	234	610	1210	526	208	89	132
9	266	562	1420	306	350	234	615	1210	296	208	89	122
10	266	559	1400	303	291	233	619	1200	142	208	89	110
11	265	556	1380	298	291	233	1200	1490	67	207	89	86
12	265	554	795	298	291	180	1520	1880	55	207	89	47
13	182	551	408	298	291	151	1390	1990	55	178	89	47
14	132	548	220	917	290	103	1310	1980	35	122	89	47
15	132	545	220	1540	256	19	1320	1990	214	80	79	47
16	369	620	509	1730	234	19	1340	2250	512	68	68	47
17	510	668	762	859	353	20	1360	2840	302	68	68	47
18	509	663	979	289	504	20	1370	2960	47	68	68	47
19	546	659	1000	195	555	20	1360	2930	79	109	68	47
20	568	695	735	159	491	20	1230	2900	138	154	68	47
21	567	761	547	144	401	20	1140	2480	196	154	68	47
22	565	707	496	145	401	21	903	1490	295	126	68	47
23	563	642	369	166	360	22	505	925	372	110	68	47
24	562	787	307	103	304	22	505	1200	372	96	68	47
25	560	889	317	50	266	23	459	746	341	65	68	47
26	558	882	445	51	233	23	386	466	233	37	68	83
27	556	875	1160	52	233	23	203	446	153	26	68	109
28	555	928	1540	52	233	31	107	280	130	26	68	109
29	616	505	1560	53	---	40	108	304	146	26	59	109
30	576	170	2160	53	---	41	109	233	245	26	47	109
31	397	---	2820	54	---	41	---	211	---	40	47	---
TOTAL	12126	19349	27842	25957	12493	3279	20924	39203	6939	5463	2158	2061
MEAN	391	645	898	837	446	106	697	1265	231	176	69.6	68.7
MAX	616	928	2820	3040	1500	234	1520	2960	526	890	89	132
MIN	132	170	220	50	55	19	42	110	35	26	47	47
CFSM	.48	.80	1.11	1.04	.55	.13	.86	1.57	.29	.22	.09	.09
IN.	.56	.89	1.28	1.20	.58	.15	.96	1.80	.32	.25	.10	.09

CAL YR 1982 TOTAL 368171 MEAN 1009 MAX 6080 MIN 47 CFSM 1.25 IN 16.95
WTR YR 1983 TOTAL 177794 MEAN 487 MAX 3040 MIN 19 CFSM .60 IN 8.19

WABASH RIVER BASIN

03327500 WABASH RIVER AT PERU, IN

LOCATION.--Lat 40°44'35", long 86°05'45", in SE¼NE¼ sec.32, T.27 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank at upstream side of bridge on U.S. Highway 31, 0.5 mile southwest of Peru, 4.4 miles downstream from Mississinewa River, and at mile 370.5.

DRAINAGE AREA.--2,686 mi².

PERIOD OF RECORD.--August 1943 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Huntington Lake (See sta 03323450), Salamonie Lake (See sta 03324450), and Mississinewa Lake (See sta 03326950).

AVERAGE DISCHARGE.--40 years, 2,356 ft³/s, 11.91 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft³/s May 18, 1943, gage height, 24.46 ft, from floodmark; minimum daily, 72 ft³/s Oct. 5, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 28.1 ft, discharge, 115,000 ft³/s, from rating curve extended above 63,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,000 ft³/s May 2, gage height, 11.47 ft; minimum daily, 141 ft³/s Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	672	3400	8740	933	794	1050	3350	1030	1660	412	142
2	286	1550	3140	7460	1070	692	3520	12600	933	2540	230	142
3	299	3440	3840	6900	3100	627	7410	7790	910	2240	184	141
4	290	2440	5130	6760	5130	685	4980	5930	941	1340	168	145
5	295	1570	6140	6290	5560	752	3850	5240	925	994	184	164
6	299	1180	6040	5380	3920	752	3770	6160	1280	801	218	173
7	1060	1030	4290	3770	2520	759	4120	5740	2100	851	247	376
8	1270	948	4900	2870	1720	746	4120	5500	1530	752	247	546
9	1280	896	4800	1650	1210	725	3920	5190	1170	614	226	551
10	1270	859	4100	1250	1120	739	5190	4920	948	500	207	753
11	1270	844	3700	1170	1140	698	5200	4770	896	489	214	1070
12	1190	859	1920	1080	1100	665	5820	4840	873	444	214	803
13	577	1680	1210	1060	1090	633	5470	4900	816	417	203	261
14	366	1850	1150	1420	1090	627	8890	4780	627	376	264	211
15	371	1770	1180	2070	979	423	8230	4520	472	308	259	202
16	1160	1920	3050	2280	956	341	6130	4770	1340	281	173	211
17	1470	2070	3750	1720	1210	318	5560	5960	1460	268	195	212
18	1600	2110	3840	933	1660	304	5310	6130	752	286	173	214
19	948	2100	3580	685	1960	361	5080	6460	439	272	167	217
20	971	2200	2650	692	2030	332	3800	6320	428	381	163	237
21	1000	2360	2140	692	1870	366	3120	5170	472	366	286	265
22	1720	2490	1930	766	1560	402	2940	3750	640	346	173	249
23	1720	2410	1550	759	1320	523	2200	4170	851	290	162	218
24	1720	2770	1640	873	1240	971	1720	4080	941	268	157	344
25	1080	3210	5200	823	1100	866	1470	2920	896	234	156	489
26	837	3110	7920	941	956	712	1320	1850	844	195	157	545
27	766	3050	6240	1090	837	1070	1110	1540	621	173	156	623
28	763	3270	8960	1000	780	3170	873	1470	450	163	155	616
29	773	4250	8140	698	---	2550	794	1370	692	159	154	602
30	881	3400	8010	712	---	1830	1260	1160	1070	156	145	602
31	602	---	9030	925	---	1300	---	1050	---	166	143	---
TOTAL	28420	62308	132570	73459	49161	25733	118227	144400	27397	18330	6212	11324
MEAN	917	2077	4276	2370	1756	830	3941	4658	913	591	200	377
MAX	1720	4250	9030	8740	5560	3170	8890	12600	2100	2540	412	1070
MIN	286	672	1150	685	780	304	794	1050	428	156	143	141
CFSM	.34	.77	1.59	.88	.65	.31	1.47	1.73	.34	.22	.07	.14
IN.	.39	.86	1.84	1.02	.68	.36	1.64	2.00	.38	.25	.09	.16

CAL YR 1982 TOTAL 1259980 MEAN 3452 MAX 15800 MIN 214 CFSM 1.29 IN 17.45
WTR YR 1983 TOTAL 697541 MEAN 1911 MAX 12600 MIN 141 CFSM .71 IN 9.66

03327520 PIPE CREEK NEAR BUNKER HILL, IN

LOCATION.--Lat 40°40'06", long 86°05'44", in NE¼SE¼ sec.29, T.26 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank 150 ft downstream from bridge on County Road 125 West, 0.5 mile northeast of Bunker Hill, and at mile 11.4.

DRAINAGE AREA.--159 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-67; May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.00 National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 147 ft³/s, 12.56 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s Jan. 21, 1974, gage height, 14.93 ft; minimum daily, 3.3 ft³/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 5	1600	1190	8.29	Apr. 14	2000	1090	7.95
Dec. 26	1400	1750	10.09	May 2	2200	*3570	*14.82
Apr. 3	0400	1020	7.69				

Minimum daily discharge, 6.4 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	37	178	242	46	54	124	914	75	70	27	7.4
2	9.9	52	217	194	203	53	612	3110	66	54	15	7.3
3	9.6	58	400	162	421	49	919	2630	65	41	12	7.1
4	9.9	45	902	139	237	47	559	1320	65	35	13	6.9
5	9.0	34	1040	125	140	46	349	608	76	36	13	6.9
6	9.3	25	845	113	110	54	267	392	272	30	12	8.0
7	11	21	488	108	95	64	256	293	323	26	11	8.0
8	12	18	314	95	80	58	249	236	182	24	11	8.2
9	11	17	231	87	72	51	256	184	130	23	10	7.3
10	11	16	190	89	65	47	353	154	107	23	9.6	7.1
11	11	18	162	93	60	42	289	135	91	22	12	7.2
12	10	19	132	85	55	40	220	122	83	21	15	6.8
13	9.9	23	114	75	50	38	229	112	77	19	12	7.0
14	9.6	21	106	73	53	39	902	106	71	17	10	6.9
15	9.9	22	116	71	60	38	755	98	70	17	9.9	6.6
16	9.3	20	378	61	76	35	371	85	66	17	9.7	7.1
17	8.5	19	369	52	95	34	285	77	59	17	11	7.4
18	8.5	17	257	45	99	39	226	74	54	19	12	6.9
19	8.2	17	205	40	102	44	182	77	60	19	11	7.4
20	9.6	20	167	42	95	42	152	132	72	18	9.7	8.1
21	8.7	25	138	45	88	66	134	146	65	17	9.2	13
22	9.0	59	119	50	86	107	120	159	55	16	8.8	11
23	8.5	79	113	56	86	98	112	311	50	15	8.6	8.2
24	8.2	121	211	53	79	91	106	225	46	14	8.3	7.1
25	7.9	120	960	48	70	92	97	158	43	14	8.1	6.6
26	8.2	88	1670	45	59	97	91	152	41	13	8.1	6.6
27	7.9	92	1260	42	54	221	86	128	38	13	8.0	6.6
28	9.3	196	1400	40	53	234	139	111	50	13	7.9	6.6
29	9.9	405	1050	41	---	188	158	103	45	12	7.8	6.9
30	9.6	270	509	48	---	146	367	94	49	12	7.7	6.4
31	14	---	328	47	---	129	---	84	---	17	7.4	---
TOTAL	298.4	1974	14569	2506	2789	2383	8965	12530	2546	704	335.8	224.6
MEAN	9.63	65.8	470	80.8	99.6	76.9	299	404	84.9	22.7	10.8	7.49
MAX	14	405	1670	242	421	234	919	3110	323	70	27	13
MIN	7.9	16	105	40	46	34	86	74	38	12	7.4	6.4
CFSM	.06	.41	2.96	.51	.63	.48	1.88	2.54	.53	.14	.07	.05
IN.	.07	.46	3.41	.59	.65	.56	2.10	2.93	.60	.16	.08	.05

CAL YR 1982 TOTAL 84916.0 MEAN 233 MAX 3150 MIN 7.9 CFSM 1.47 IN 19.87
WTR YR 1983 TOTAL 49824.8 MEAN 137 MAX 3110 MIN 6.4 CFSM .86 IN 11.66

03328000 EEL RIVER AT NORTH MANCHESTER, IN

LOCATION.--Lat 40°59'55", long 85°45'50", in NE¼NE¼ sec.5, T.29 N., R.7 E., Wabash County, Hydrologic Unit 05120104, on right bank 200 ft downstream from Main Street bridge in North Manchester, 1.3 miles upstream from Pony Creek, and at mile 52.7.

DRAINAGE AREA.--417 mi², includes that of Pony Creek.

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Gage-height records since November 20, 1923 are available from the district office.

REVISED RECORDS.--WSP 1275: 1930-37, 1939, 1940(M), 1942, 1948. WSP 1909: 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.00 ft National Geodetic Vertical Datum of 1929. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft upstream at same datum.

REMARKS.--Records good. Records include flow of Pony Creek.

AVERAGE DISCHARGE.--54 years, 361 ft³/s, 11.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,180 ft³/s Mar. 13, 1982, gage height, 13.72 ft; maximum gage height, 14.00 ft Feb. 27, 1936; minimum daily discharge, 16 ft³/s Oct. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 3	0100	2280	7.13	Apr. 3	0400	3050	8.45
Dec. 6	0200	2540	7.59	Apr. 14	2000	2780	8.00
Dec. 26	0400	2580	7.66	May 2	1600	*4990	*11.09

Minimum daily discharge, 58 ft³/s Sept. 12-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	141	771	540	247	208	497	1290	218	137	110	62
2	72	1840	637	463	567	203	1710	4300	209	201	99	62
3	73	2120	1030	406	1200	197	2900	3860	212	174	85	62
4	69	1730	2160	363	645	195	2430	3270	226	146	85	61
5	69	1260	2330	329	405	193	1890	2600	213	137	87	60
6	68	699	2410	311	335	192	1230	1990	242	126	87	63
7	72	488	1950	302	300	204	1210	1390	294	121	78	64
8	75	375	1370	286	270	230	1060	899	251	116	75	64
9	73	308	839	271	255	234	889	692	221	114	72	62
10	75	268	641	267	240	218	1400	579	204	111	71	60
11	71	247	533	274	230	205	1520	507	192	108	73	59
12	71	265	449	269	215	195	1230	451	184	110	73	58
13	71	372	387	252	205	191	956	399	177	105	71	58
14	71	305	346	246	205	189	2350	371	173	103	71	58
15	71	261	359	242	215	164	2420	364	167	100	71	58
16	71	232	1260	229	266	178	1950	329	163	99	72	58
17	69	215	1090	222	369	175	1340	315	155	96	71	58
18	69	200	698	205	388	182	893	286	150	99	73	58
19	69	193	546	190	374	206	711	286	149	99	70	67
20	72	640	482	180	364	209	586	295	146	97	68	84
21	75	898	416	190	338	212	502	273	146	94	67	77
22	69	657	363	205	316	237	445	392	143	91	65	77
23	67	512	340	241	296	233	404	552	141	88	64	72
24	65	649	490	276	274	240	369	407	139	88	63	68
25	64	516	1580	255	251	239	335	324	135	85	63	64
26	65	405	2350	232	227	236	312	285	130	85	63	64
27	65	408	1810	218	216	754	296	261	127	84	63	64
28	65	801	1930	208	211	2110	304	249	132	82	62	64
29	64	1670	1670	204	---	1600	318	244	142	82	62	64
30	64	1180	1010	233	---	925	708	239	141	82	62	64
31	79	---	677	274	---	628	---	229	---	93	62	---
TOTAL	2169	19855	32924	8383	9424	11398	33165	27928	5322	3353	2258	1914
MEAN	70.0	662	1062	270	337	368	1106	901	177	108	72.8	63.8
MAX	79	2120	2410	540	1200	2110	2900	4300	294	201	110	84
MIN	64	141	340	180	205	175	296	229	127	82	62	58
CFSM	.17	1.59	2.55	.65	.81	.88	2.65	2.16	.42	.26	.18	.15
IN.	.19	1.77	2.94	.75	.84	1.02	2.96	2.49	.47	.30	.20	.17

CAL YR 1982 TOTAL 232447 MEAN 637 MAX 6840 MIN 64 CFSM 1.53 IN 20.74
WTR YR 1983 TOTAL 158093 MEAN 433 MAX 4300 MIN 58 CFSM 1.04 IN 14.10

03328430 WEESAU CREEK NEAR DEEDSVILLE, IN

LOCATION.--Lat 40°54'34", long 86°07'36", in NW¼NW¼ sec.6, T.28 N., R.4 E., Miami County, Hydrologic Unit 05120104, on left bank 100 ft downstream from bridge on County Road 1000 North, and 1.5 miles west of Deedsville.

DRAINAGE AREA.--8.87 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 9.26 ft³/s, 14.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s Mar. 13, 1982, gage height, 7.37 ft; minimum daily, 0.26 ft³/s Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 2	0800	98	3.58	Mar. 27	1900	120	3.86
Dec. 5	1800	109	3.73	Apr. 2	1700	198	4.72
Dec. 25	1600	183	4.57	Apr. 14	1200	183	4.57
Dec. 28	0500	78	3.31	May 2	0400	*392	*6.42

Minimum daily discharge, 0.35 ft³/s Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	13	11	16	5.4	4.3	13	68	4.2	2.0	1.9	.88
2	.64	74	8.8	13	41	4.2	147	229	3.9	2.2	1.9	.80
3	.64	32	47	11	36	3.9	94	86	4.5	2.6	1.9	.80
4	.57	13	67	9.7	11	3.9	54	59	4.5	2.6	1.9	.72
5	.57	5.8	82	8.8	8.0	3.9	33	43	3.9	2.6	1.9	.72
6	.64	3.7	54	8.2	7.0	3.9	22	32	7.3	2.6	1.7	.72
7	.88	3.0	23	8.2	6.0	4.5	25	24	6.1	2.6	1.7	.72
8	.80	2.6	15	7.3	5.5	4.5	18	18	4.8	2.6	1.7	.72
9	.70	2.4	11	6.9	5.0	4.2	16	14	4.2	2.6	1.7	.72
10	.80	2.0	9.2	7.3	4.6	3.9	17	13	3.7	2.4	1.6	.64
11	.96	2.2	8.2	7.3	4.3	3.7	16	11	3.2	2.4	1.6	.64
12	.88	6.5	6.5	6.1	4.1	3.7	13	9.2	3.2	2.4	1.6	.57
13	.80	7.3	5.8	5.8	4.0	3.7	41	7.3	3.2	2.4	1.5	.57
14	.72	4.5	5.8	5.8	4.1	3.7	146	7.8	3.2	2.4	1.5	.51
15	.67	3.2	13	5.4	4.5	3.4	71	8.2	3.2	2.4	1.3	.51
16	.63	2.8	41	4.7	5.0	3.2	45	6.5	3.2	2.4	1.3	.51
17	.60	2.4	19	4.3	5.4	3.0	38	6.1	3.0	2.2	1.3	.51
18	.60	2.4	12	4.0	6.0	3.7	29	5.8	2.6	2.2	1.2	.45
19	.60	2.2	9.7	3.8	6.5	4.2	23	5.8	2.6	2.2	1.2	.45
20	1.1	6.5	8.2	4.0	6.6	4.5	20	5.4	2.2	2.2	1.2	.45
21	.96	10	6.9	4.2	6.5	4.8	19	5.1	2.4	2.2	1.2	.45
22	.88	8.2	6.1	4.8	6.4	4.8	17	23	2.4	2.2	1.1	.45
23	.88	6.5	6.1	5.1	6.1	5.1	16	21	2.2	2.2	1.1	.45
24	.80	8.2	58	5.1	5.6	5.1	14	12	2.2	2.2	1.1	.45
25	.72	5.8	111	5.1	5.5	4.8	13	9.2	2.2	2.0	1.0	.45
26	.72	4.8	79	4.8	5.1	5.1	12	7.3	2.2	2.0	.96	.40
27	.72	5.4	49	4.5	4.8	68	11	6.1	2.2	2.0	.96	.35
28	.72	33	64	4.5	4.6	66	12	5.8	2.2	2.0	.96	.35
29	.96	40	37	4.5	---	32	12	5.4	2.2	2.0	.96	.35
30	1.0	18	24	6.5	---	18	28	5.1	2.0	2.0	.88	.35
31	1.7	---	19	5.8	---	11	---	4.8	---	2.0	.88	---
TOTAL	24.50	331.4	917.3	202.5	224.6	302.7	1035	763.9	98.9	70.8	42.70	16.66
MEAN	.79	11.0	29.6	6.53	8.02	9.76	34.5	24.6	3.30	2.28	1.38	.56
MAX	1.7	74	111	16	41	68	147	229	7.3	2.6	1.9	.88
MIN	.57	2.0	5.8	3.8	4.0	3.0	11	4.8	2.0	2.0	.88	.35
CFSM	.09	1.24	3.34	.74	.90	1.10	3.89	2.77	.37	.26	.16	.06
IN.	.10	1.39	3.85	.85	.94	1.27	4.34	3.20	.41	.30	.18	.07

CAL YR 1982 TOTAL 4913.06 MEAN 13.5 MAX 312 MIN .57 CFSM 1.52 IN 20.60
WTR YR 1983 TOTAL 4030.96 MEAN 11.0 MAX 229 MIN .35 CFSM 1.24 IN 16.90

03328500 EEL RIVER NEAR LOGANSPORT, IN

LOCATION.--Lat 40°46'55", long 86°15'50", in NE¼SE¼ sec.14, T.27 N., R.2 E., Cass County, Hydrologic Unit 05120105, on right bank at downstream side of bridge on Adamsboro Road, 5.5 miles northeast of Logansport, and 7.4 miles upstream from mouth.

DRAINAGE AREA.--789 mi².

PERIOD OF RECORD.--July 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.50 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--40 years, 741 ft³/s, 12.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s Dec. 9, 1966, gage height, 12.20 ft; minimum daily, 70 ft³/s Mar. 15, 1960, results of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 13.2 ft, from floodmark, discharge, 17,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	1100	5260	7.84	Apr. 14	2100	5550	8.00
Apr. 3	1600	6120	8.33	May 3	0600	*9250	*9.99

Minimum daily discharge, 136 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	451	1620	1200	522	439	1130	2210	536	441	206	144
2	202	2420	1240	994	723	433	2940	7690	521	409	205	139
3	194	3490	1730	875	1950	425	5910	8770	520	556	196	138
4	192	2650	3520	780	1680	415	4850	6310	538	424	188	138
5	196	2040	4490	718	1020	411	3490	4520	542	350	178	136
6	195	1430	4470	675	816	415	2620	3460	593	309	179	139
7	215	906	3310	647	694	429	2170	2700	697	281	180	148
8	208	688	2510	619	622	445	2200	2020	669	265	174	147
9	215	568	1780	586	571	461	1760	1530	578	255	163	148
10	213	497	1330	579	541	462	2020	1270	526	246	156	147
11	206	458	1100	585	508	438	2280	1110	493	239	173	146
12	202	480	910	581	481	419	2180	972	464	231	177	143
13	199	566	784	551	463	406	1840	884	442	223	167	138
14	200	621	717	528	451	399	4190	839	422	216	162	137
15	198	519	715	516	462	393	4980	839	412	213	157	137
16	197	456	1630	495	494	381	3450	776	397	210	155	145
17	197	414	2270	479	579	371	2750	708	382	207	167	145
18	197	389	1580	461	706	385	2000	668	369	238	172	146
19	197	374	1180	410	719	413	1530	650	358	229	172	143
20	211	423	986	385	694	443	1280	667	348	214	164	146
21	205	1370	869	380	671	467	1100	638	340	211	155	164
22	202	1300	766	420	637	466	952	763	333	200	154	174
23	203	984	713	469	607	482	863	1120	321	192	153	167
24	200	945	984	501	571	487	803	1040	312	184	149	167
25	198	1030	2930	526	530	492	740	822	303	182	147	166
26	197	788	5040	494	490	490	691	713	294	180	150	157
27	199	691	3550	466	459	853	653	646	290	176	147	156
28	200	881	3620	446	445	3300	663	608	308	174	143	154
29	199	2530	3380	436	---	3090	677	585	708	173	145	149
30	200	2360	2260	454	---	2100	821	568	541	168	142	146
31	240	---	1540	495	---	1420	---	553	---	190	143	---
TOTAL	6288	32719	63524	17751	19106	22030	63539	56649	13557	7786	5119	4450
MEAN	203	1091	2049	573	682	711	2118	1827	452	251	165	148
MAX	240	3490	5040	1200	1950	3300	5910	8770	708	556	206	174
MIN	192	374	713	380	445	371	653	553	290	168	142	136
CFSM	.26	1.38	2.60	.73	.86	.90	2.68	2.32	.57	.32	.21	.19
IN.	.30	1.54	3.00	.84	.90	1.04	3.00	2.67	.64	.37	.24	.21

CAL YR 1982 TOTAL 456971 MEAN 1252 MAX 13200 MIN 190 CFSM 1.59 IN 21.55
WTR YR 1983 TOTAL 312518 MEAN 856 MAX 8770 MIN 136 CFSM 1.09 IN 14.73

03329000 WABASH RIVER AT LOGANSPORT, IN

LOCATION.--Lat 40°44'47", long 86°22'39", in SW¼NE¼ sec.35, T.27 N., R.1 E., Cass County, Hydrologic Unit 05120105, on left bank 150 ft downstream from Cicott Street bridge in Logansport, 1,000 ft downstream from Eel River, and at mile 353.7.

DRAINAGE AREA.--3,779 mi².

PERIOD OF RECORD.--April to September, November and December 1903, March to November 1904, March 1905 to July 1906, May 1923 to current year. January, February, and December 1904, January and February 1905 (gage heights only). Gage-height records collected at same site December 1910 to December 1916, and since January 1926 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 783: 1934. WSP 1335: 1904, 1925(M), 1926-30, 1931(M), 1932-35, 1937-39, 1948. WSP 1385: 1903, 1905-6, 1923-25. WSP 1505: 1906(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

REMARKS.--Records good. Flow partially regulated by Huntington Lake (See sta 03323450), Salamonie Lake (See sta 03324450), and Mississinewa Lake (See sta 03326950).

AVERAGE DISCHARGE.--60 years (1923 to current year), 3,310 ft³/s, 11.90 in/yr. The figure published in the 1982 report was in error; the correct figure is 59 years, 3317 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,800 ft³/s May 18, 1943, gage height, 21.32 ft; minimum daily, 135 ft³/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 25.3 ft Mar. 26, 1913, from floodmarks, discharge, 140,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,400 ft³/s May 2, gage height, 11.55 ft; minimum daily, 255 ft³/s Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	514	1000	4830	10800	1410	1180	2290	5730	1410	1910	464	269
2	482	3130	5150	9160	1690	1140	5800	25000	1310	2490	533	262
3	482	6640	6230	8270	4610	1030	15000	21500	1280	3080	390	257
4	481	5210	9730	8050	6960	1020	11300	15100	1340	1830	379	255
5	482	3560	12300	7350	6990	1110	8100	10900	1360	1290	361	261
6	485	2560	11900	6790	5410	1130	6780	10500	1820	1120	358	298
7	742	1840	8290	5380	3600	1170	6620	9140	3110	943	386	337
8	1250	1540	7930	4330	2620	1160	6810	8040	2540	1060	401	598
9	1280	1380	7240	2820	1950	1140	5990	7070	1870	864	378	651
10	1270	1270	5720	1940	1630	1150	7440	6470	1480	750	349	703
11	1260	1230	4980	1760	1600	1120	7780	6120	1350	722	399	941
12	1250	1310	3970	1700	1540	1050	8400	5810	1300	687	384	1130
13	953	1850	2200	1600	1490	1010	7690	6020	1240	646	368	568
14	605	2330	1840	1670	1480	982	13700	5770	1090	615	347	387
15	533	2130	1800	2460	1450	914	15300	5490	970	570	437	359
16	736	2140	3500	2750	1380	763	10700	5420	1230	516	368	371
17	1380	2280	6420	2510	1600	725	9020	6520	1890	491	391	373
18	1550	2300	5770	1430	2230	727	7880	7230	1190	515	403	368
19	1140	2270	5130	1080	2660	781	7040	7150	928	528	353	361
20	1020	2410	4200	1040	2730	830	5670	7130	805	539	338	408
21	1000	3340	3310	1220	2600	866	4380	6210	819	593	357	450
22	1390	3580	2930	1280	2290	914	4070	4940	865	562	408	462
23	1610	3280	2660	1220	1970	950	3240	5180	1030	508	321	427
24	1610	3400	2560	1270	1770	1290	2660	5360	1100	454	306	404
25	1270	4140	7250	1340	1630	1410	2250	4190	1150	426	296	606
26	956	3810	14600	1320	1420	1220	2000	2670	1080	390	308	642
27	882	3620	11100	1420	1300	1720	1800	2210	907	352	305	698
28	868	4030	13200	1430	1190	6200	1570	1930	884	321	294	714
29	862	6830	13500	1190	---	6180	1550	1810	1100	307	287	707
30	960	6100	11200	1100	---	4220	1960	1650	1350	301	283	703
31	903	---	11400	1260	---	2940	---	1470	---	340	270	---
TOTAL	30206	90510	212840	96940	69200	48042	194790	219730	39798	25720	11222	14970
MEAN	974	3017	6866	3127	2471	1550	6493	7088	1327	830	362	499
MAX	1610	6830	14600	10800	6990	6200	15300	25000	3110	3080	533	1130
MIN	481	1000	1800	1040	1190	725	1550	1470	805	301	270	255
CFSM	.26	.80	1.82	.83	.65	.41	1.72	1.88	.35	.22	.10	.13
IN.	.30	.89	2.10	.95	.68	.47	1.92	2.16	.39	.25	.11	.15

CAL YR 1982 TOTAL 1910668 MEAN 5235 MAX 32100 MIN 419 CFSM 1.39 IN 18.81
WTR YR 1983 TOTAL 1053968 MEAN 2888 MAX 25000 MIN 255 CFSM .76 IN 10.38

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

LOCATION.--Lat 40°42'46", long 86°41'49", in NW¼SW¼ sec.7, T.26 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on left bank 5 ft downstream from bridge on County Road 900 West, and 2.5 miles northeast of Patton.

DRAINAGE AREA.--6.83 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 644.97 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1979, at datum 1.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--15 years, 6.96 ft³/s, 13.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 456 ft³/s June 5, 1981, gage height, 5.12 ft; maximum gage height, 5.30 ft June 14, 1975; minimum daily discharge, 0.10 ft³/s Sept. 8-10, 13, 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 65 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1300	92	3.77	Apr. 14	0800	85	3.67
Apr. 2	1600	89	3.73	May 2	0100	*342	*4.86

Minimum daily discharge, 0.10 ft³/s Sept. 9-10, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	9.4	6.2	7.8	3.1	3.4	12	62	3.3	3.4	.53	.15
2	.43	32	5.4	6.7	22	3.2	73	145	3.3	2.4	.51	.15
3	.48	13	20	5.9	19	3.2	42	44	4.3	2.0	.50	.15
4	.52	5.6	30	5.4	9.6	3.2	26	32	4.0	1.9	.53	.15
5	.56	3.1	46	5.1	7.6	3.2	19	23	3.4	1.7	.51	.13
6	.97	2.1	26	5.1	6.7	3.4	16	18	3.8	1.5	.49	.18
7	2.1	1.7	16	4.5	5.6	4.4	19	14	3.3	1.4	.46	.15
8	.61	1.4	12	4.1	5.1	5.4	15	12	3.1	1.4	.46	.10
9	.61	1.3	9.4	4.2	4.6	4.2	14	9.3	2.9	1.3	.41	.10
10	.61	1.3	8.2	4.4	4.2	3.8	14	7.8	3.0	1.3	.43	.10
11	.52	1.5	6.2	4.1	3.8	3.5	13	7.1	2.9	1.2	.56	.13
12	.52	4.4	5.3	3.5	3.5	3.4	11	6.5	2.8	1.1	.56	.15
13	.48	3.2	4.8	3.5	3.7	3.4	26	6.3	2.7	1.1	.31	.10
14	.48	2.4	4.6	3.7	4.1	3.4	65	16	2.7	1.0	.31	.10
15	.52	1.9	9.8	3.2	4.6	3.1	30	16	5.0	1.0	.31	.14
16	.66	1.8	14	3.2	5.4	3.1	21	9.7	3.8	.97	.28	.18
17	.72	1.6	10	3.1	5.1	3.1	18	7.6	3.3	.88	.52	.18
18	.66	1.5	8.8	2.7	5.3	3.7	14	6.9	3.1	.83	.39	.18
19	.72	1.4	6.9	2.6	5.4	3.8	12	6.7	3.0	.77	.31	.17
20	.78	1.9	5.6	2.6	5.1	3.8	9.7	5.7	2.8	.80	.28	.24
21	.61	2.2	4.6	2.7	4.8	4.2	8.7	5.5	2.6	.79	.28	.25
22	.78	2.4	4.5	3.2	4.8	4.4	8.0	5.6	2.5	.77	.35	.21
23	.90	2.7	4.4	3.4	4.5	4.4	7.8	4.9	2.6	.73	.23	.22
24	.84	3.8	18	3.2	4.2	4.4	7.1	4.5	2.5	.71	.26	.23
25	.84	3.1	53	3.0	3.7	4.2	6.6	4.6	2.4	.66	.20	.25
26	.84	2.9	33	2.9	3.4	5.1	6.3	4.2	2.3	.66	.23	.25
27	.78	3.2	24	2.7	3.4	28	6.0	4.1	2.3	.64	.26	.25
28	.72	13	34	2.7	3.5	21	6.1	4.4	3.1	.59	.23	.25
29	.72	13	18	2.9	---	14	5.6	4.1	3.0	.56	.20	.27
30	.66	8.6	12	3.5	---	11	12	3.9	6.2	.55	.20	.28
31	1.3	---	9.6	3.0	---	9.2	---	3.7	---	.58	.20	---
TOTAL	22.33	147.4	470.3	118.6	165.8	181.6	543.9	505.1	96.0	35.19	11.30	5.39
MEAN	.72	4.91	15.2	3.83	5.92	5.86	18.1	16.3	3.20	1.14	.36	.18
MAX	2.1	32	53	7.8	22	28	73	145	6.2	3.4	.56	.28
MIN	.39	1.3	4.4	2.6	3.1	3.1	5.6	3.7	2.3	.55	.20	.10
CFSM	.11	.72	2.23	.56	.87	.86	2.65	2.39	.47	.17	.05	.03
IN.	.12	.80	2.56	.65	.90	.99	2.96	2.75	.52	.19	.06	.03

CAL YR 1982 TOTAL 3205.79 MEAN 8.78 MAX 81 MIN .29 CFSM 1.29 IN 17.46
WTR YR 1983 TOTAL 2302.91 MEAN 6.31 MAX 145 MIN .10 CFSM .92 IN 12.54

03329700 DEER CREEK NEAR DELPHI, IN

LOCATION.--Lat 40°35'25", long 86°37'15", in NE¼NE¼ sec.27, T.25 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on downstream side of left wingwall of highway bridge, 2.6 miles northeast of Delphi Post Office, and 4.8 miles upstream from mouth.

DRAINAGE AREA.--274 mi².

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1944, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 553.81 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--40 years, 242 ft³/s, 11.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s June 10, 1958, gage height, 18.26 ft; minimum daily, 6.2 ft³/s Sept. 25-28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft, from floodmarks, discharge, 18,000 ft³/s, from rating curve extended above 8,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0400	2100	6.46
May 2	1115	*8120	*12.58

Minimum daily discharge, 19 ft³/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	58	316	427	106	113	306	1720	141	104	53	22
2	34	272	254	352	287	110	904	7560	130	90	43	22
3	33	338	429	294	668	106	1580	5080	131	77	41	21
4	33	225	1240	251	410	104	1020	1830	134	70	42	20
5	32	152	1550	230	279	103	710	1120	221	67	38	20
6	34	112	1500	212	241	106	593	819	649	62	34	22
7	43	92	936	203	205	132	567	653	634	58	32	22
8	45	82	650	181	183	154	569	550	396	57	30	22
9	43	74	495	166	166	130	479	435	265	55	28	21
10	41	68	402	170	152	118	484	364	209	52	27	20
11	39	72	338	171	142	108	443	321	175	50	37	20
12	38	86	275	161	131	102	370	289	155	47	34	20
13	37	97	249	147	123	99	354	266	140	45	31	19
14	37	93	217	145	124	99	1220	253	129	44	30	19
15	36	83	223	142	134	97	1370	228	136	43	28	19
16	36	75	535	129	144	92	793	200	118	41	27	21
17	35	70	592	128	156	89	671	182	109	40	57	20
18	35	67	463	112	157	101	552	169	102	41	66	20
19	36	65	380	94	164	108	430	169	152	41	42	20
20	42	67	306	100	161	108	346	163	167	44	35	28
21	39	72	255	105	155	118	296	150	122	41	31	28
22	39	83	221	115	153	121	263	202	102	37	28	25
23	38	116	209	126	155	126	242	303	93	37	27	24
24	38	156	341	123	146	125	225	265	87	37	26	25
25	37	179	1080	115	135	123	204	225	82	35	25	24
26	45	154	1970	108	120	123	190	205	77	34	26	24
27	39	161	1380	103	112	400	180	182	75	32	25	23
28	36	280	1550	99	113	785	205	181	82	31	25	23
29	37	641	1240	100	---	587	315	174	82	30	24	22
30	37	457	752	110	---	422	466	160	119	29	23	22
31	47	---	547	112	---	343	---	153	---	43	23	---
TOTAL	1177	4547	20895	5031	5222	5454	16347	24571	5214	1514	1038	658
MEAN	38.0	152	674	162	187	176	545	793	174	48.8	33.5	21.9
MAX	47	641	1970	427	668	785	1580	7560	649	104	66	28
MIN	32	58	209	94	106	89	180	150	75	29	23	19
CFSM	.14	.56	2.46	.59	.68	.64	1.99	2.89	.64	.18	.12	.08
IN.	.16	.62	2.84	.68	.71	.74	2.22	3.34	.71	.21	.14	.09

CAL YR 1982 TOTAL 144537 MEAN 396 MAX 3220 MIN 32 CFSM 1.45 IN 19.62
WTR YR 1983 TOTAL 91668 MEAN 251 MAX 7560 MIN 19 CFSM .92 IN 12.45

03330500 TIPPECANOE RIVER AT OSWEGO, IN

LOCATION.--Lat 41°19'14", long 85°47'21", in NE¼NE¼ sec.14, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft downstream from dam at Tippecanoe Lake Outlet in Oswego, 3 miles east of Leesburg, and at mile 158.9.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.00 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by flashboards at lake outlet.

AVERAGE DISCHARGE.--34 years, 102 ft^3/s, 12.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 950 ft^3/s Mar. 21, 1982, gage height, 9.25 ft; minimum daily, 0.08 ft^3/s Aug. 4, 5, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 411 ft^3/s May 8, gage height, 8.00 ft; minimum daily, 6.9 ft^3/s Sept. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	33	196	229	98	97	144	217	151	28	20	12
2	49	115	205	222	100	94	165	272	146	124	20	12
3	47	153	219	214	102	91	191	316	144	154	20	11
4	43	164	233	205	104	89	220	350	139	145	19	11
5	36	173	252	198	107	88	252	380	135	99	19	10
6	36	182	267	191	109	88	276	400	132	29	18	10
7	38	187	275	185	111	91	294	405	118	29	17	9.8
8	37	184	279	181	113	91	305	403	34	30	17	9.9
9	37	181	280	175	114	90	310	388	36	31	17	9.6
10	36	173	275	166	113	90	311	371	40	33	15	9.4
11	35	169	269	158	111	91	311	345	64	31	14	9.0
12	34	166	260	151	108	94	313	319	86	29	14	9.0
13	36	162	252	144	106	95	318	295	83	28	14	9.0
14	35	155	243	138	104	92	332	278	83	27	15	8.7
15	34	150	240	133	103	88	342	266	80	26	17	8.7
16	34	145	238	128	101	85	348	249	77	25	16	8.7
17	28	139	235	124	100	80	355	227	67	24	17	8.5
18	17	135	230	119	99	78	352	211	45	23	17	8.6
19	18	133	227	115	99	75	345	199	45	23	16	8.4
20	18	141	222	110	98	76	335	193	44	23	16	8.1
21	19	145	212	108	99	83	325	184	43	23	16	8.1
22	19	147	199	106	99	84	316	182	36	23	15	7.8
23	19	151	189	106	101	86	301	180	26	23	15	7.6
24	18	153	182	103	102	88	280	174	26	22	14	7.3
25	18	154	182	101	102	88	261	174	26	22	14	7.1
26	18	156	181	100	101	91	243	178	25	21	14	6.9
27	18	159	184	99	99	94	226	175	25	21	14	6.9
28	19	163	189	97	98	103	218	169	27	20	13	8.7
29	24	175	207	95	---	113	207	164	27	20	12	14
30	26	187	219	97	---	125	208	159	27	20	12	13
31	28	---	226	97	---	136	---	154	---	20	12	---
TOTAL	922	4630	7067	4395	2901	2854	8404	7977	2037	1196	489	278.8
MEAN	29.7	154	228	142	104	92.1	280	257	67.9	38.6	15.8	9.29
MAX	49	187	280	229	114	136	355	405	151	154	20	14
MIN	17	33	181	95	98	75	144	154	25	20	12	6.9
CFSM	.26	1.36	2.02	1.26	.92	.82	2.48	2.27	.60	.34	.14	.08
IN.	.30	1.52	2.33	1.45	.96	.94	2.77	2.63	.67	.39	.16	.09

CAL YR 1982 TOTAL 59840.0 MEAN 164 MAX 944 MIN 17 CFSM 1.45 IN 19.70
WTR YR 1983 TOTAL 43150.8 MEAN 118 MAX 405 MIN 6.9 CFSM 1.04 IN 14.21

03331110 WALNUT CREEK NEAR WARSAW, IN

LOCATION.--Lat 41°12'17", long 85°52'11", in NW¼NE¼ sec.30, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft upstream from bridge on County Road 200 South, 0.3 mile downstream from small right-bank tributary, and 2.5 miles south of court house in Warsaw.

DRAINAGE AREA.--19.6 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow occasionally regulated by lakes upstream.

AVERAGE DISCHARGE.--14 years, 17.6 ft³/s, 12.19 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561 ft³/s June 13, 1981, gage height, 5.38 ft; minimum daily, 0.49 ft³/s Sept. 11, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 220 ft³/s May 2, gage height, 3.70 ft; minimum daily, 0.44 ft³/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	4.7	33	31	12	11	32	59	12	12	1.9	.57
2	1.1	58	29	28	19	11	65	189	11	78	1.7	.55
3	1.1	88	38	25	32	11	106	164	11	56	1.5	.53
4	1.0	53	62	22	31	10	95	120	14	46	1.5	.52
5	1.0	40	74	21	26	10	77	89	13	30	1.5	.50
6	.94	27	80	19	22	10	65	71	15	22	1.5	.69
7	.77	18	68	18	19	13	62	58	16	14	1.5	.85
8	.94	13	53	17	16	14	57	50	13	12	1.5	.69
9	1.0	11	42	16	14	13	51	43	11	10	1.5	.69
10	.96	9.9	35	16	13	11	48	36	9.9	9.4	1.3	.56
11	.92	9.4	29	19	12	11	46	33	9.0	8.6	1.3	.56
12	.90	13	25	17	11	9.9	42	29	8.2	6.8	1.3	.50
13	.88	18	23	15	10	9.9	43	26	7.5	5.8	1.2	.48
14	.85	16	20	14	10	9.9	94	25	6.8	4.7	1.2	.47
15	.84	13	22	13	11	9.9	94	28	6.5	3.9	1.2	.46
16	.82	11	34	11	12	9.4	74	25	6.1	3.3	1.2	.45
17	.81	9.4	38	10	13	8.6	60	22	5.5	3.3	1.2	.45
18	.80	9.0	33	9.0	15	9.0	47	19	5.2	3.3	1.2	.44
19	.80	8.2	29	8.0	16	10	41	20	5.0	3.3	1.1	1.1
20	1.2	19	26	8.2	16	11	40	23	4.7	3.1	1.1	1.6
21	1.3	33	24	8.5	16	14	36	20	4.2	3.1	1.0	1.1
22	3.7	37	22	9.4	15	13	33	26	3.9	2.9	1.0	1.0
23	4.4	32	20	11	14	13	30	29	3.9	2.7	.94	2.0
24	3.5	28	27	12	14	12	28	25	3.9	2.3	.94	1.7
25	2.7	24	49	12	13	11	25	21	3.9	2.2	.85	1.6
26	2.3	21	62	11	12	11	23	17	3.7	2.0	.85	1.5
27	2.0	22	56	10	11	24	22	15	3.3	1.9	.77	1.3
28	1.6	28	61	10	11	54	22	14	4.2	1.7	.72	1.2
29	1.3	39	57	9.9	---	57	23	14	4.2	1.7	.67	1.1
30	1.3	39	46	12	---	46	35	14	4.4	1.7	.63	1.0
31	1.5	---	36	12	---	37	---	13	---	1.9	.59	---
TOTAL	44.43	751.6	1253	455.0	436	504.6	1516	1337	230.0	359.6	36.36	26.16
MEAN	1.43	25.1	40.4	14.7	15.6	16.3	50.5	43.1	7.67	11.6	1.17	.87
MAX	4.4	88	80	31	32	57	106	189	16	78	1.9	2.0
MIN	.77	4.7	20	8.0	10	8.6	22	13	3.3	1.7	.59	.44
CFSM	.07	1.28	2.06	.75	.80	.83	2.58	2.20	.39	.59	.06	.04
IN.	.08	1.43	2.38	.86	.83	.96	2.88	2.54	.44	.68	.07	.05

CAL YR 1982 TOTAL 9479.63 MEAN 26.0 MAX 365 MIN .77 CFSM 1.33 IN 17.99
WTR YR 1983 TOTAL 6949.75 MEAN 19.0 MAX 189 MIN .44 CFSM .97 IN 13.19

03331500 TIPPECANOE RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE¼SE¼ sec.6, T.31 N., R.1 W., Pulaski County, Hydrologic Unit 05120106, on right bank at downstream side of bridge on County Road 200 East, 1.0 mile upstream from Bartee ditch, 1.3 miles southwest of Ora, and at mile 78.5

DRAINAGE AREA.--856 mi^2.

PERIOD OF RECORD.--September 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944(M). WSP 1505: 1949-50(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 692.91 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 30, 1956, nonrecording gage on upstream side of old highway bridge, 120 ft downstream. July 30, 1956, to Dec. 20, 1964, water-stage recorder on right bank at downstream side of old highway bridge, and Dec. 21, 1964, to Aug. 19, 1965, nonrecording gage on right bank 500 ft downstream. All gages at same datum.

REMARKS.--Records good except those for no gage-height record, which are fair.

AVERAGE DISCHARGE.--40 years, 831 ft^3/s, 13.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,660 ft^3/s June 15, 1981, gage height, 15.08 ft; minimum daily, 87 ft^3/s Sept. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 7	1100	2840	10.97	May 4	0300	*4860	*12.80
Dec. 29	1700	2340	10.38	July 4	1400	2420	10.46
Apr. 4	2000	3120	11.29				
Apr. 16	1000	3910	12.05				

Minimum daily discharge, 161 ft^3/s Sept. 15.

NOTE.-- No gage-height record Oct. 23 to Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	300	1300	1720	677	613	1280	1810	867	423	324	183
2	248	1000	1200	1530	732	604	1550	2550	826	755	302	181
3	250	1350	1340	1370	1070	597	2430	4190	805	1790	284	178
4	246	1520	1860	1250	1100	593	3030	4770	811	2330	269	172
5	242	1380	2290	1160	971	583	3040	4350	782	1950	262	169
6	242	1170	2630	1100	911	583	2810	4000	779	1460	252	169
7	257	1000	2820	1060	876	621	2640	3660	800	1220	247	178
8	252	860	2800	1010	812	651	2570	3370	762	957	243	177
9	248	790	2400	968	780	675	2500	3040	733	727	233	175
10	257	740	2100	950	752	670	2370	2710	705	612	224	174
11	248	700	1900	947	724	649	2260	2410	652	550	225	171
12	246	740	1700	924	700	621	2120	2100	604	506	223	166
13	242	870	1500	882	675	607	2010	1870	575	468	216	165
14	240	980	1350	856	663	600	2420	1780	558	438	211	163
15	230	900	1280	828	661	590	3370	1750	558	421	204	161
16	218	830	1330	792	675	576	3880	1620	556	404	203	165
17	212	760	1460	770	700	563	3690	1480	541	390	216	168
18	216	700	1410	742	712	567	3360	1370	522	381	232	170
19	263	670	1340	687	724	602	3050	1320	506	384	232	181
20	281	730	1290	665	727	621	2750	1270	488	381	229	194
21	273	800	1230	653	724	651	2440	1200	464	379	217	216
22	252	910	1170	670	717	658	2140	1180	435	359	206	229
23	241	1000	1120	700	714	661	1900	1300	421	341	201	232
24	242	930	1140	724	705	663	1730	1320	407	326	197	233
25	242	1030	1510	714	680	658	1570	1260	388	315	194	220
26	250	970	2020	702	651	646	1420	1200	372	299	192	214
27	250	900	2280	685	630	712	1300	1110	364	290	192	207
28	240	860	2220	665	625	1280	1260	1030	383	280	192	195
29	239	1100	2310	649	---	1650	1250	984	389	267	190	190
30	240	1400	2230	665	---	1530	1410	937	403	262	186	190
31	250	---	1960	687	---	1360	---	903	---	284	187	---
TOTAL	7603	27890	54490	27725	21088	22655	69550	63844	17456	19949	6985	5586
MEAN	245	930	1758	894	753	731	2318	2059	582	644	225	186
MAX	281	1520	2820	1720	1100	1650	3880	4770	867	2330	324	233
MIN	212	300	1120	649	625	563	1250	903	364	262	186	161
CFSM	.29	1.09	2.05	1.04	.88	.85	2.71	2.41	.68	.75	.26	.22
IN.	.33	1.21	2.37	1.20	.92	.98	3.02	2.77	.76	.87	.30	.24

CAL YR 1982 TOTAL 461169 MEAN 1263 MAX 8370 MIN 212 CFSM 1.48 IN 20.04
WTR YR 1983 TOTAL 344821 MEAN 945 MAX 4770 MIN 161 CFSM 1.10 IN 14.99

03333000 TIPPECANOE RIVER NEAR DELPHI, IN

LOCATION.--Lat 40°37'02", long 86°45'39", in NW¼NE¼ sec.16, T.25 N., R.3 W., Carroll County, Hydrologic Unit 05120106, on right bank 2 miles northeast of Springboro, 1.7 miles downstream from Big Creek, 5 miles northwest of Delphi, and at mile 15.1.

DRAINAGE AREA.--1,865 mi^2.

PERIOD OF RECORD.--March to December 1903, March to December 1904, March 1905 to July 1906, November and December 1908, July 1939 to current year. Published as "at Springboro" 1903-08.

REVISED RECORDS.--WSP 973: 1942. WSP 1335: 1905-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 552.01 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles downstream at different datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--44 years (water years 1940 to current year), 1,663 ft^3/s, 12.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,600 ft^3/s Feb. 10, 1959, gage height, 15.10 ft; minimum daily, 1.0 ft^3/s Nov. 2, 3, 1954, caused by repair work at Oakdale Dam, 6.5 miles upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft^3/s May 2, gage height, 12.30 ft; minimum daily, 225 ft^3/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	398	704	1730	3270	1390	1240	3000	5590	1850	2120	627	317
2	525	4320	1760	2810	2100	1360	6580	14300	1640	1430	545	315
3	633	4340	3000	2560	3450	1170	8000	11400	1750	1540	437	264
4	1560	2700	5870	2390	2890	1380	6350	9180	1750	2420	438	265
5	1800	2530	6470	2330	2430	1180	5480	8310	1750	2520	678	264
6	1670	2210	5970	2160	2100	1160	5280	7040	1680	2410	436	335
7	871	2020	5340	2030	1940	1320	5320	6070	1480	1770	435	342
8	409	1650	5020	2070	1760	1610	4990	5780	1690	1750	397	335
9	512	1920	3860	1750	1850	1470	4490	4720	1560	1390	305	257
10	450	1380	3700	1900	1530	1490	4580	4420	1520	1230	338	333
11	972	1220	3650	2090	1560	1490	4240	3990	1480	1040	632	377
12	495	1340	2900	1810	1460	1480	3950	3590	1390	792	344	252
13	378	2320	3040	1740	1470	1290	4450	3390	1120	896	363	228
14	451	2010	2300	1740	1460	1200	7490	3840	1240	820	400	225
15	447	1230	2660	1740	1480	1310	7540	3860	1290	823	357	227
16	507	1280	2770	1480	1520	1160	5980	3430	1140	718	394	302
17	434	1250	3080	1690	1800	1170	6210	2970	1130	796	675	359
18	383	1120	2690	1280	1660	1310	5840	2740	1110	657	438	361
19	385	1200	2770	1450	1810	1580	4970	2740	1100	642	436	297
20	417	1170	2470	1120	1610	1780	4500	2230	1090	783	433	338
21	507	1180	2370	1330	1610	1560	3990	2600	819	654	381	342
22	395	887	2260	1640	1700	1880	3590	2390	1000	467	312	300
23	449	1020	2190	1690	1500	1460	3440	2380	946	614	390	441
24	510	1540	2480	1440	1620	2000	2730	2400	834	564	320	347
25	507	1090	4060	1350	1830	1440	2800	2460	759	560	314	352
26	479	1550	4970	1500	1310	1440	2650	2120	761	440	344	418
27	384	2010	4320	1520	1200	2680	2510	2180	761	528	420	395
28	402	2040	5110	1370	1440	4090	2250	2100	1040	437	426	313
29	505	2870	4710	1390	---	3630	2370	1980	1960	562	380	313
30	383	2510	3550	1540	---	3440	4100	2030	1990	513	258	316
31	439	---	3660	1390	---	3100	---	1710	---	438	307	---
TOTAL	18657	54611	110730	55570	49480	53870	139670	133940	39630	32324	12960	9530
MEAN	602	1820	3572	1793	1767	1738	4656	4321	1321	1043	418	318
MAX	1800	4340	6470	3270	3450	4090	8000	14300	1990	2520	678	441
MIN	378	704	1730	1120	1200	1160	2250	1710	759	437	258	225
CFSM	.32	.98	1.92	.96	.95	.93	2.50	2.32	.71	.56	.22	.17
IN.	.37	1.09	2.21	1.11	.99	1.07	2.79	2.67	.79	.64	.26	.19

CAL YR 1982 TOTAL 920210 MEAN 2521 MAX 15300 MIN 230 CFSM 1.35 IN 18.35
WTR YR 1983 TOTAL 710972 MEAN 1948 MAX 14300 MIN 225 CFSM 1.05 IN 14.18

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE¼SE¼ sec.14, T.23 N., R.5 E., Howard County, Hydrologic Unit 05120107, on right bank at downstream side of bridge on County Road 1100 East, 0.5 mile downstream from Mud Creek, 1.5 miles southeast of Jerome, and at mile 79.9.

DRAINAGE AREA.--146 mi².

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 820.04 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 10 cfs, fair below.

AVERAGE DISCHARGE.--22 years, 131 ft³/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,140 ft³/s June 3, 1980, gage height, 13.34 ft; minimum daily, 0.89 ft³/s Jan. 24-26, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 18 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0500	1990	8.90	May 2	1345	*2260	*9.45
Dec. 28	1400	1420	7.49				

Minimum daily discharge, 1.3 ft³/s Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	6.7	111	282	47	54	99	520	78	138	9.2	2.0
2	5.2	7.7	86	230	213	52	292	1910	68	79	7.7	1.8
3	5.2	15	114	185	464	48	723	1350	66	56	6.4	1.4
4	5.1	11	517	152	264	47	501	778	67	46	6.6	1.5
5	5.0	9.0	637	134	163	46	349	513	59	40	6.8	1.7
6	6.0	7.7	626	120	138	51	318	366	92	33	5.7	1.5
7	7.7	7.0	373	116	118	53	376	293	155	28	5.3	2.0
8	7.2	6.3	249	98	93	51	371	229	111	24	4.8	2.0
9	6.7	6.0	186	91	86	47	339	171	85	23	4.3	1.5
10	6.3	5.8	155	94	79	43	419	144	72	22	3.9	1.5
11	6.0	6.0	132	99	70	40	331	127	64	20	6.3	1.6
12	5.8	15	108	88	62	37	267	117	58	18	7.2	1.5
13	5.6	11	93	79	57	36	243	109	54	16	5.7	1.3
14	5.4	8.5	86	77	60	37	744	104	51	15	4.8	1.3
15	5.3	7.5	84	75	64	36	765	98	50	15	4.1	1.6
16	5.1	7.0	274	63	80	33	447	85	47	14	3.8	2.8
17	5.0	6.8	284	58	93	32	351	75	41	12	5.0	3.7
18	5.0	6.8	213	51	91	38	292	69	50	12	5.6	3.6
19	5.0	6.8	173	45	94	42	228	152	276	17	5.4	3.0
20	6.4	12	138	44	87	39	181	228	315	19	5.1	3.8
21	6.0	25	112	47	80	143	153	127	147	16	4.0	5.6
22	5.8	20	97	54	80	178	133	298	92	12	3.1	4.0
23	5.5	17	93	57	82	132	123	547	68	11	3.3	2.8
24	5.3	15	191	55	77	119	115	410	56	11	3.0	2.2
25	5.1	14	926	50	67	107	102	264	48	10	2.7	2.5
26	5.0	13	1740	45	57	96	93	192	42	8.8	2.6	2.4
27	4.9	17	1080	43	52	115	88	143	38	7.5	2.4	2.9
28	4.8	124	1330	41	53	141	107	125	37	6.8	2.2	2.2
29	4.7	251	929	43	---	127	135	114	36	6.6	2.2	2.1
30	5.2	158	550	49	---	108	283	101	133	6.1	2.1	2.4
31	6.6	---	376	49	---	103	---	90	---	8.4	2.0	---
TOTAL	174.0	823.6	12063	2714	2971	2231	8968	9849	2556	751.2	143.3	70.2
MEAN	5.61	27.5	389	87.5	106	72.0	299	318	85.2	24.2	4.62	2.34
MAX	7.7	251	1740	282	464	178	765	1910	315	138	9.2	5.6
MIN	4.7	5.8	84	41	47	32	88	69	36	6.1	2.0	1.3
CFSM	.04	.19	2.66	.60	.73	.49	2.05	2.18	.58	.17	.03	.02
IN.	.04	.21	3.07	.69	.76	.57	2.28	2.51	.65	.19	.04	.02

CAL YR 1982 TOTAL 75039.6 MEAN 206 MAX 2370 MIN 4.7 CFSM 1.41 IN 19.12
WTR YR 1983 TOTAL 43314.3 MEAN 119 MAX 1910 MIN 1.3 CFSM .82 IN 11.04

03333600 KOKOMO CREEK NEAR KOKOMO, IN

LOCATION.--Lat 40°26'28", long 86°05'20", in NW¼SW¼ sec.16, T.23 N., R.4 E., Howard County, Hydrologic Unit 05120107, on left bank at upstream side of bridge on County Road 200 East, 2.6 miles southeast of intersection of U.S. Highways 31 and 35 in Kokomo, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--24.7 mi^2.

PERIOD OF RECORD.--July 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 5 cfs, which are poor.

AVERAGE DISCHARGE.--24 years, 21.7 ft^3/s, 11.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/s Apr. 20, 1964, gage height, 9.88 ft; minimum daily, 0.08 ft^3/s Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 260 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 5	1500	264	4.42	Apr. 14	1830	268	4.46
Dec. 25	1700	453	6.24	May 2	0400	*644	*7.97
Dec. 28	0700	336	5.13				

Minimum daily discharge, 0.16 ft^3/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.5	36	41	9.0	9.6	20	190	10	19	1.7	.24
2	1.8	5.6	43	35	56	8.9	124	571	9.3	11	.89	.24
3	1.6	7.0	78	29	70	9.1	146	249	9.6	8.2	.80	.29
4	1.7	5.0	219	25	36	9.0	79	133	9.3	7.2	1.1	.24
5	1.8	3.2	247	23	27	8.5	55	87	8.6	6.0	1.1	.20
6	2.0	2.5	161	22	24	9.4	50	62	31	4.6	.89	.24
7	4.2	2.3	83	21	20	9.5	59	50	26	3.9	.62	.29
8	2.7	2.3	57	17	16	9.2	53	39	17	3.6	.62	.29
9	2.6	2.2	45	17	16	8.2	51	31	14	3.3	.47	.24
10	2.9	1.9	39	18	14	7.8	83	26	12	3.0	.47	.20
11	2.6	2.0	33	18	13	7.1	64	23	10	2.5	1.3	.19
12	2.5	4.0	28	15	11	6.7	49	20	9.5	2.2	.80	.18
13	2.3	4.8	24	14	11	6.8	42	19	8.5	2.0	.62	.16
14	2.1	4.0	22	14	11	7.1	180	18	7.9	1.7	.62	.16
15	2.0	3.2	26	13	13	6.5	166	17	7.6	1.7	.47	.16
16	1.9	2.9	69	11	18	6.1	73	15	6.9	1.4	.55	.21
17	1.8	2.4	53	9.4	19	6.2	56	13	6.2	1.2	1.2	.23
18	1.6	2.2	42	8.3	19	7.4	44	12	5.9	1.2	.80	.23
19	1.6	2.0	35	7.8	19	8.5	35	14	20	1.6	.55	.19
20	3.8	1.9	29	8.3	17	7.5	30	16	15	1.4	.47	.34
21	4.0	7.3	24	8.9	15	19	27	13	9.5	1.3	.41	1.1
22	3.4	16	22	10	16	21	23	22	7.6	1.2	.35	.55
23	2.8	12	21	11	15	17	22	29	6.6	1.1	.41	.41
24	2.4	13	63	10	13	18	20	22	5.8	1.4	.35	.35
25	2.2	10	292	9.1	11	17	18	19	5.2	1.2	.29	.35
26	2.1	8.0	306	8.4	9.7	19	16	16	4.6	1.1	.29	.29
27	1.9	10	211	8.0	9.7	25	15	14	4.4	.99	.29	.35
28	1.8	75	298	7.8	9.9	29	30	15	15	1.0	.29	.35
29	1.8	79	155	8.3	---	25	23	15	14	1.2	.24	.35
30	1.8	48	81	9.5	---	22	75	13	44	1.3	.24	.24
31	2.4	---	54	8.7	---	20	---	12	---	2.2	.29	---
TOTAL	72.0	343.2	2896	466.5	538.3	391.1	1728	1795	361.0	100.69	19.49	8.86
MEAN	2.32	11.4	93.4	15.0	19.2	12.6	57.6	57.9	12.0	3.25	.63	.30
MAX	4.2	79	306	41	70	29	180	571	44	19	1.7	1.1
MIN	1.6	1.9	21	7.8	9.0	6.1	15	12	4.4	.99	.24	.16
CFSM	.09	.46	3.78	.61	.78	.51	2.33	2.34	.49	.13	.03	.01
IN.	.11	.52	4.36	.70	.81	.59	2.60	2.70	.54	.15	.03	.01

CAL YR 1982 TOTAL 14563.50 MEAN 39.9 MAX 526 MIN 1.5 CFSM 1.62 IN 21.93
WTR YR 1983 TOTAL 8720.14 MEAN 23.9 MAX 571 MIN .16 CFSM .97 IN 13.13

03333700 WILDCAT CREEK AT KOKOMO, IN

LOCATION.--Lat 40°28'24", long 86°09'26", in NE¼NW¼ sec.2, T.23 N., R.3 E., Howard County, Hydrologic Unit 05120107, on right bank on property of Penn-Dixie Steel Corporation in Kokomo, 0.5 mile downstream from Kokomo Creek, 0.4 mile upstream from Dixon Road bridge, and at mile 62.5.

DRAINAGE AREA.--242 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair. Some regulation of Kokomo Reservoirs No. 1 and No. 2, combined capacity, 4,170 acre-ft, for municipal water supply and by Kokomo Sewage Treatment Plant.

AVERAGE DISCHARGE.--28 years, 229 ft³/s, 12.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s Feb. 10, 1959; Maximun gage height, 12.5 ft (from graph) June 3, 1980; minimum daily, 7.2 ft³/s Sept. 30, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,030 ft³/s May 2, gage height, 9.11 ft; minimum daily, 17 ft³/s Sept. 3.

REVISIONS.--The peak discharges above the base of 2,100 ft³/s and maximum (*) for water years 1980, 1981, and 1982 have been revised as shown in the following table. They supersede figures published in the 1980, 1981, and 1982 reports.

Water year	Date	Time	Discharge (ft³/s)	Gage height (ft)	Water year	Date	Time	Discharge (ft³/s)	Gage height (ft)
1980	June 3, 1980	1400	*7,150	[a]*12.5	1982	Mar. 12, 1982	1000	*4,380	*9.51
1981	Sept. 14, 1981	2300	*1,740	*5.94		Mar. 17, 1982	0600	1,880	6.19
1982	Jan. 5, 1982	0400	2,160	6.64		Mar. 20, 1982	1800	3,040	7.89
	Feb. 24, 1982	0800	2,280	6.82		Apr. 17, 1982	0800	2,410	7.02
	Mar. 5, 1982	2400	1,970	6.34					

[a] from graph

Revised daily discharges, in cubic feet per second, for high-water periods in 1980 and 1982 are given below. They supersede those published in the 1980 and 1982 reports.

June 2, 1980...	2830	Feb. 21, 1982...	1470	Mar. 6, 1982...	1810	Mar. 16, 1982...	1620
3	6960	22	1850	11	1900	17	1710
4	4850	23	1890	12	4070	20	2710
5	1720	24	2240	13	3690	21	2250
Jan. 4, 1982...	1670	25	1600	14	2800	Apr. 17, 1982..	2000
5	1940	Mar. 5, 1982...	1790	15	1590	18	1310
31	1720						

Month	Ft³/s-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
June 1980	26788	6960	91	893	3.69	4.12
Water year 1980	108283	6960	30	296	1.22	16.65
Calendar year 1980	93053	6960	16	254	1.05	14.30
January 1982	14274	1940	80	460	1.90	2.19
February 1982	18457	2240	102	659	2.72	2.84
March 1982	42647	4070	386	1376	5.69	6.56
April 1982	15046	2000	130	502	2.07	2.31
Water year 1982	125503	4070	23	344	1.42	19.29

03333700 WILDCAT CREEK AT KOKOMO, IN-- Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	34	266	503	117	102	230	1520	148	245	37	19
2	22	56	362	402	293	93	651	3880	127	172	32	19
3	21	81	511	335	658	63	1170	2770	127	112	31	17
4	24	63	923	281	529	62	927	1400	119	119	37	18
5	29	36	1340	250	324	62	668	958	175	92	31	19
6	36	28	1140	224	262	100	546	683	427	79	27	23
7	59	26	787	204	233	77	600	548	327	71	25	19
8	33	27	539	197	196	72	635	449	263	61	25	23
9	35	28	398	170	171	69	606	333	193	58	27	19
10	31	27	332	165	158	71	702	278	159	58	23	19
11	35	30	287	168	142	68	618	240	135	57	57	20
12	36	66	234	170	129	64	498	219	121	58	27	20
13	33	41	203	155	116	61	493	203	109	55	25	21
14	32	35	184	138	116	64	1250	190	101	55	22	21
15	31	35	204	139	123	65	1270	187	97	54	24	20
16	30	36	373	133	144	63	830	160	95	52	26	24
17	30	33	522	122	168	62	637	141	91	50	48	20
18	29	33	412	113	176	85	515	136	85	52	27	22
19	29	35	329	96	176	70	408	140	212	84	26	26
20	30	53	283	92	167	80	329	306	457	54	24	113
21	32	80	237	94	158	113	281	235	263	50	22	54
22	31	66	204	125	151	241	254	396	170	49	23	29
23	30	100	186	115	152	247	232	702	125	51	25	27
24	30	114	334	111	146	219	198	657	106	49	24	25
25	28	82	1430	107	131	199	179	464	89	44	21	23
26	27	92	2380	100	114	194	170	330	77	42	21	25
27	30	114	1970	93	101	239	159	252	72	43	21	26
28	27	332	1970	91	99	290	397	246	108	40	18	25
29	27	455	1620	89	---	275	276	198	126	41	20	25
30	25	380	1010	98	---	225	667	180	231	36	20	26
31	28	---	674	96	---	204	---	164	---	78	20	---
TOTAL	943	2618	21644	5176	5450	3899	16396	18565	4935	2161	836	787
MEAN	30.4	87.3	698	167	195	126	547	599	165	69.7	27.0	26.2
MAX	59	455	2380	503	658	290	1270	3880	457	245	57	113
MIN	21	26	184	89	99	61	159	136	72	36	18	17
CFSM	.13	.36	2.88	.69	.81	.52	2.26	2.48	.68	.29	.11	.11
IN.	.14	.40	3.33	.80	.84	.60	2.52	2.85	.76	.33	.13	.12

CAL YR 1982 TOTAL 135044 MEAN 370 MAX 4070 MIN 21 CFSM 1.53 IN 20.76
WTR YR 1983 TOTAL 83410 MEAN 229 MAX 3880 MIN 17 CFSM .95 IN 12.82

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03334500 SOUTH FORK WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°25'04", long 86°46'05", in SW¼SW¼ sec.21, T.23 N., R.3 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank 40 ft upstream from bridge on State Highway 26 , 0.5 mile upstream from Middle Fork, 4.4 miles upstream from mouth, and 5 miles east of Lafayette.

DRAINAGE AREA.--243 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948(M). WSP 1505: 1947. WSP 1725: 1951-53(M), 1955(M). WSP 1909: 1955(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.60 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--40 years, 240 ft^3/s, 13.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft^3/s May 2, 1983, gage height, 15.68 ft, from rating curve extended above 6,000 ft^3/s on basis of contracted-opening measurement at 16.8 ft; minimum daily, 15 ft^3/s Sept. 19, 22, 1944, Aug. 30, 31, Sept. 1, 14, 15, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 16.8 ft, from floodmarks, discharge, 17,900 ft^3/s by contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 26	0600	3,200	8.25
May 2	0600	*15,100	*15.68

Minimum daily discharge, 26 ft^3/s Sept. 14, 15, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	57	197	451	141	130	273	1600	172	464	101	31
2	37	128	168	384	298	128	576	11000	161	286	60	30
3	36	141	333	334	612	126	1040	3680	159	176	49	29
4	36	113	1140	293	410	123	719	1560	158	145	45	28
5	37	86	1250	267	290	122	512	1020	152	125	48	27
6	40	73	1030	246	262	128	509	732	227	112	42	29
7	68	66	716	232	230	178	619	566	297	98	39	28
8	67	61	518	213	199	169	571	527	228	87	37	30
9	49	59	406	196	189	152	459	431	191	79	36	29
10	47	56	341	194	177	142	402	371	169	73	35	28
11	45	55	312	193	166	135	352	329	156	68	41	27
12	43	60	264	185	157	129	306	301	147	65	53	27
13	40	72	227	174	149	125	291	292	140	63	40	27
14	43	66	208	171	149	125	926	279	134	62	37	26
15	42	62	208	171	153	123	1090	250	137	60	35	26
16	41	59	367	156	156	118	638	226	129	58	35	28
17	40	57	389	157	161	114	510	204	123	57	44	28
18	39	56	323	144	157	125	440	190	117	56	75	27
19	41	56	283	122	159	139	370	186	133	54	54	26
20	52	57	243	130	161	136	312	184	210	75	43	30
21	54	66	212	133	155	154	266	170	151	65	37	41
22	50	115	191	147	154	187	239	244	125	55	35	42
23	47	107	182	162	156	187	222	662	108	50	33	33
24	45	154	288	160	153	185	209	549	101	47	33	31
25	44	141	1450	153	148	182	190	370	97	45	32	30
26	43	124	2690	145	138	187	176	299	94	44	32	28
27	46	148	1440	140	131	327	165	250	88	42	32	28
28	44	198	1790	136	130	554	411	229	90	40	38	28
29	42	342	1240	136	---	457	534	214	556	39	37	28
30	43	259	759	143	---	355	656	197	765	39	34	28
31	48	---	550	145	---	302	---	184	---	88	32	---
TOTAL	1387	3094	19715	6013	5541	5744	13983	27296	5515	2817	1324	878
MEAN	44.7	103	636	194	198	185	466	881	184	90.9	42.7	29.3
MAX	68	342	2690	451	612	554	1090	11000	765	464	101	42
MIN	36	55	168	122	130	114	165	170	88	39	32	26
CFSM	.18	.42	2.62	.80	.82	.76	1.92	3.63	.76	.37	.18	.12
IN.	.21	.47	3.02	.92	.85	.88	2.14	4.18	.84	.43	.20	.13

CAL YR 1982 TOTAL 128010 MEAN 351 MAX 2840 MIN 36 CFSM 1.44 IN 19.60
WTR YR 1983 TOTAL 93307 MEAN 256 MAX 11000 MIN 26 CFSM 1.05 IN 14.28

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°26'26", long 86°49'45", in SW¼NW¼ sec.13, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank about 200 ft downstream of bridge on County Road 2A East, 2.8 miles downstream from South Fork Wildcat Creek, 3.7 miles northeast of courthouse in Lafayette, and 4.8 miles upstream from mouth.

DRAINAGE AREA.--794 mi^2.

PERIOD OF RECORD.--May 1954 to current year.

REVISED RECORDS.--WSP 1555: 1955, 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--29 years, 766 ft^3/s, 13.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s June 10, 1958, gage height, 21.52 ft, from rating curve extended above 18,000 ft^3/s; minimum daily, 46 ft^3/s Sept. 28, 29, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of about 25.4 ft, from profile by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	1200	*22,100	*20.59

Minimum daily discharge, 100 ft^3/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	197	999	1840	392	396	845	4050	632	1040	252	118
2	128	712	825	1500	700	392	1770	17800	593	695	216	115
3	124	753	1360	1270	1690	386	3340	14800	571	514	164	113
4	115	514	3360	1080	1480	380	2920	7770	562	398	150	110
5	108	359	4010	958	1120	371	2220	4530	550	350	148	109
6	110	296	3830	878	917	375	1890	2960	901	330	143	129
7	212	263	2900	817	761	464	1960	2240	1430	288	136	120
8	237	237	2040	746	670	542	1980	2050	980	264	129	111
9	197	212	1570	700	616	458	1730	1730	780	246	125	112
10	159	198	1330	664	562	421	1590	1440	634	231	118	109
11	144	189	1180	651	529	397	1550	1260	541	221	131	106
12	138	215	996	624	505	376	1380	1140	484	211	142	104
13	142	317	856	593	481	356	1260	1080	452	201	159	102
14	140	260	771	574	469	350	2930	1090	428	196	132	101
15	138	215	748	556	466	342	3940	966	425	191	127	100
16	135	198	1200	511	484	329	3070	892	390	189	121	104
17	133	188	1430	465	512	323	2250	818	372	182	151	106
18	131	180	1360	430	530	344	1840	763	358	178	204	104
19	133	173	1160	408	549	389	1520	741	349	172	206	103
20	133	168	987	390	552	389	1270	731	477	194	163	114
21	133	207	856	395	541	386	1080	799	625	230	147	142
22	151	318	752	430	521	465	963	920	505	178	137	224
23	159	360	701	462	516	567	880	1930	411	163	129	171
24	133	481	986	477	505	620	810	1880	364	156	127	140
25	128	637	3450	446	487	589	735	1460	334	151	124	126
26	126	510	5830	426	452	571	673	1160	315	151	124	118
27	129	500	5420	411	421	893	636	965	300	140	125	117
28	128	737	5940	389	405	1590	1080	848	294	136	140	113
29	128	1460	5000	382	---	1410	1720	810	853	133	135	112
30	128	1250	3780	404	---	1120	2010	730	1400	130	127	114
31	138	---	2460	415	---	917	---	679	---	206	122	---
TOTAL	4373	12304	68087	20292	17833	16908	51842	81032	17310	8065	4554	3567
MEAN	141	410	2196	655	637	545	1728	2614	577	260	147	119
MAX	237	1460	5940	1840	1690	1590	3940	17800	1430	1040	252	224
MIN	108	168	701	382	392	323	636	679	294	130	118	100
CFSM	.18	.52	2.77	.83	.80	.69	2.18	3.29	.73	.33	.19	.15
IN.	.20	.58	3.19	.95	.84	.79	2.43	3.80	.81	.38	.21	.17

CAL YR 1982 TOTAL 443976 MEAN 1216 MAX 8660 MIN 108 CFSM 1.53 IN 20.80
WTR YR 1983 TOTAL 306167 MEAN 839 MAX 17800 MIN 100 CFSM 1.06 IN 14.34

03335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE¼SW¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft downstream from Brown Street in Lafayette, 0.2 mile upstream from Main Street bridge, 0.3 mile downstream from Harrison Memorial Bridge, 5.1 miles downstream from Wildcat Creek, and at mile 311.9.

DRAINAGE AREA.--7,267 mi².

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage heights only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP 1505: 1950. WSP 1555: 1928(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft National Geodetic Vertical Datum of 1929. Prior to May 2, 1903, nonrecording gage 0.5 mile upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--60 years (1923 to current year), 6,459 ft³/s, 12.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s May 19, 1943, gage height, 28.47 ft; minimum daily, 399 ft³/s Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft, from floodmark determined by National Weather Service, discharge, 190,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 60,800 ft³/s May 3, gage height, 21.79 ft; minimum daily, 732 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	2240	9220	17600	3710	3470	7240	13100	4650	5280	1320	814
2	1370	5700	8210	15400	4560	3490	10500	42400	4330	4990	1540	813
3	1400	11700	9280	13600	8670	3290	21400	59100	4280	5300	1520	803
4	1800	10500	16500	12300	11600	3170	25800	48200	4310	5560	1260	736
5	2670	8320	23600	11800	11100	3240	21000	35000	4360	4950	1250	732
6	2710	6360	25600	10800	10200	3160	16600	26000	5700	4530	1390	837
7	2660	5470	22500	9970	8060	3430	15400	22000	6940	3850	1130	887
8	1900	4250	17500	8340	6410	3720	15500	19100	6880	3390	1140	917
9	2420	4310	15400	7310	5530	3770	14400	16200	5700	3400	1060	1050
10	2500	4020	13700	5840	4690	3560	13600	14400	4860	2860	1030	1130
11	2410	3330	11600	5380	4470	3530	14800	12900	4330	2500	1090	1300
12	2850	3530	9670	5270	4250	3440	14500	12000	4080	2260	1430	1550
13	2270	4110	8160	4810	4140	3270	14300	11700	3640	2120	1030	1660
14	1900	5240	6460	4690	4070	3090	19000	11900	3510	2040	1050	1070
15	1590	4710	5920	4900	4080	3020	28700	11800	3600	2000	1050	916
16	1470	4250	7070	5310	4080	3040	26100	10900	3320	1890	1100	781
17	1720	4220	10500	5360	4400	2640	21200	10600	3530	1780	1260	868
18	2380	4250	11400	4830	4470	2710	18300	11100	3880	1800	1730	921
19	2560	4220	10400	3810	5280	3020	15700	11300	3270	1760	1300	909
20	2170	4170	9400	3490	5450	3310	13700	11000	3170	1650	1170	927
21	2070	4560	7890	3280	5270	3540	11500	10900	2940	1870	1100	1090
22	2040	5440	7050	3840	5360	3310	9910	9750	2930	1720	950	1030
23	2420	5270	6390	4220	4900	3770	9110	9890	2820	1480	1060	1040
24	2700	5670	6860	3950	4550	3770	7800	10800	2890	1590	954	1110
25	2720	6130	11700	3860	4580	4080	6680	9970	2790	1440	887	1010
26	2360	6170	24000	3840	4210	3920	6490	7900	2770	1410	874	1070
27	1940	6700	26400	3940	3750	4310	5970	6490	2660	1270	969	1330
28	1780	6910	25300	3880	3540	8920	5830	5970	2570	1260	1030	1260
29	1810	9870	27200	3790	---	13100	6350	5580	3630	1190	996	1240
30	1820	12100	23300	3610	---	11100	7200	5360	5390	1190	884	1230
31	1980	---	19200	3700	---	8790	---	4800	---	1360	782	---
TOTAL	65740	173720	437380	202720	155380	133980	424580	498110	119730	79690	35336	30931
MEAN	2121	5791	14110	6539	5549	4322	14150	16070	3991	2571	1140	1031
MAX	2850	12100	27200	17600	11600	13100	28700	59100	6940	5560	1730	1660
MIN	1350	2240	5920	3280	3540	2640	5830	4800	2570	1190	782	732
CFSM	.29	.80	1.94	.90	.76	.60	1.95	2.21	.55	.35	.16	.14
IN.	.34	.89	2.24	1.04	.80	.69	2.17	2.55	.61	.41	.18	.16

CAL YR 1982 TOTAL 3823240 MEAN 10470 MAX 55300 MIN 1160 CFSM 1.44 IN 19.57
WTR YR 1983 TOTAL 2357297 MEAN 6458 MAX 59100 MIN 732 CFSM .89 IN 12.07

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE¼SE¼ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft downstream from county road bridge, 0.3 mile north of Chase, 2 miles east of Boswell, and 5 miles west of Oxford.

DRAINAGE AREA.--39.4 mi².

PERIOD OF RECORD.--June 1971 to current year.

REVISED RECORD.--WDR IN-80-1: 1971-79 (P).

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--12 years (1972 to current year), 40.4 ft³/s, 13.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,420 ft³/s June 2, 1980, gage height, 11.67 ft; minimum daily, 0.16 ft³/s Sept. 14, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	0200	*1460	*9.66

Minimum daily discharge, 0.16 ft³/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	9.3	46	53	14	17	70	303	18	55	1.2	.49
2	1.2	72	111	45	142	16	327	750	17	28	.74	.42
3	1.3	45	211	39	101	15	222	209	21	20	.71	.39
4	1.3	22	229	35	53	15	141	149	24	17	.88	.38
5	1.4	15	204	33	33	15	116	114	19	13	1.1	.38
6	2.6	11	148	32	26	16	115	94	19	11	.76	.34
7	10	9.8	108	30	24	17	139	79	17	9.6	.75	.30
8	3.6	8.4	88	26	23	19	105	63	16	8.8	.71	.38
9	2.7	7.3	71	26	21	16	107	55	15	8.0	.61	.23
10	2.3	7.1	63	28	19	15	115	49	14	7.1	.56	.23
11	2.0	8.0	51	26	18	14	96	45	13	6.3	1.9	.23
12	1.8	16	39	22	16	14	79	41	13	5.5	1.4	.30
13	1.8	13	34	22	16	15	90	38	13	4.6	.73	.23
14	1.7	12	31	23	19	15	266	54	13	4.2	.70	.16
15	1.6	9.2	33	20	22	13	133	65	13	3.9	.62	.30
16	1.5	8.8	52	18	25	13	96	47	12	3.6	.53	.47
17	1.4	8.2	66	16	21	13	86	40	11	3.1	1.6	.38
18	1.5	7.6	60	14	22	21	70	38	11	2.6	2.7	.38
19	1.8	7.6	50	12	23	45	57	38	11	2.4	.95	.30
20	3.2	9.3	42	11	23	34	49	33	10	1.8	.76	.30
21	2.2	20	36	13	23	31	44	31	11	1.7	.63	.99
22	1.5	23	35	17	24	30	40	33	8.8	1.5	.59	1.1
23	1.4	25	34	18	23	29	38	35	8.4	1.3	.60	.66
24	1.3	30	77	16	22	29	34	28	8.0	1.3	.62	.47
25	1.4	23	257	15	19	27	32	28	7.5	1.1	.54	.38
26	1.5	22	167	13	17	30	30	25	7.2	.93	.66	.38
27	1.5	22	129	12	17	162	29	24	7.5	.79	.99	.38
28	1.4	81	185	13	17	157	32	24	12	.69	1.6	.30
29	1.5	89	110	15	---	107	29	24	18	.67	1.1	.38
30	1.5	60	79	18	---	83	117	21	139	.70	.76	.47
31	3.6	---	64	14	---	67	---	20	---	.89	.57	---
TOTAL	64.7	701.6	2910	695	823	1110	2904	2597	527.4	227.07	28.57	12.10
MEAN	2.09	23.4	93.9	22.4	29.4	35.8	96.8	83.8	17.6	7.32	.92	.40
MAX	10	89	257	53	142	162	327	750	139	55	2.7	1.1
MIN	1.2	7.1	31	11	14	13	29	20	7.2	.67	.53	.16
CFSM	.05	.59	2.38	.57	.75	.91	2.46	2.13	.45	.19	.02	.01
IN.	.06	.66	2.75	.66	.78	1.05	2.74	2.45	.50	.21	.03	.01

CAL YR 1982 TOTAL 20556.30 MEAN 56.3 MAX 917 MIN 1.2 CFSM 1.43 IN 19.41
WTR YR 1983 TOTAL 12600.44 MEAN 34.5 MAX 750 MIN .16 CFSM .88 IN 11.90

03335700 BIG PINE CREEK NEAR WILLIAMSPORT, IN

LOCATION.--Lat 40°19'03", long 87°17'26", in SW¼SE¼ sec.26, T.22 N., R.8 W., Warren County, Hydrologic Unit 05120108, on downstream side of county road bridge, 1.6 miles north of city limits of Williamsport, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.68 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to May 19, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--28 years, 270 ft³/s, 11.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s Feb. 10, 1959, from rating curve extended above 8,000 ft³/s on basis of contracted-opening measurement, gage height, 16.00 ft, from floodmark; minimum daily, 6.5 ft³/s Oct. 6-8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	2300	*8800	*13.74

Minimum daily discharge, 9.0 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	56	322	421	118	131	465	2850	192	708	30	16
2	14	216	341	368	642	127	1630	6380	177	389	25	14
3	15	311	692	324	928	122	1810	3160	139	273	21	13
4	15	211	1130	290	595	120	1460	2100	212	221	21	13
5	16	135	1160	276	360	118	1030	1530	220	185	23	12
6	18	99	1060	261	275	131	887	1100	219	153	22	14
7	63	80	795	257	244	137	1020	813	190	133	19	12
8	49	70	558	227	216	160	885	643	170	119	18	10
9	33	62	440	215	199	156	788	523	158	109	16	10
10	28	56	400	223	182	146	818	435	148	101	15	9.6
11	25	54	359	219	168	132	740	412	139	94	34	9.6
12	22	72	300	198	151	122	621	382	132	84	26	9.6
13	21	94	245	184	143	123	671	438	127	75	21	10
14	20	83	255	186	148	126	1480	747	122	68	18	9.4
15	21	74	329	180	163	120	1310	668	126	64	17	9.0
16	20	54	452	161	180	111	951	540	120	61	16	11
17	20	60	427	144	182	109	707	416	110	58	38	11
18	21	56	383	122	170	137	603	366	102	55	37	10
19	23	54	346	109	178	262	502	352	101	50	28	9.5
20	33	60	296	102	180	286	435	320	103	45	22	10
21	31	75	259	106	175	262	390	290	127	40	18	13
22	27	103	239	128	177	248	359	299	103	36	16	11
23	25	127	236	144	178	239	339	324	89	33	15	12
24	24	146	366	136	169	241	319	287	83	31	14	11
25	22	152	1240	113	156	232	292	260	77	29	14	11
26	22	148	1320	108	137	240	277	247	73	27	14	11
27	21	149	1120	104	130	698	268	230	72	26	31	11
28	21	261	1300	95	131	1070	369	236	76	25	228	10
29	21	508	1030	100	---	850	316	228	240	24	37	9.9
30	21	413	671	139	---	602	1070	212	1100	24	24	9.3
31	29	---	501	130	---	490	---	202	---	25	19	---
TOTAL	755	4049	18572	5770	6675	8048	22812	26990	5097	3365	897	331.9
MEAN	24.4	135	599	186	238	260	760	871	170	109	28.9	11.1
MAX	63	508	1320	421	928	1070	1810	6380	1100	708	228	16
MIN	14	54	236	95	118	109	268	202	72	24	14	9.0
CFSM	.08	.42	1.85	.58	.74	.81	2.35	2.70	.53	.34	.09	.03
IN.	.09	.47	2.14	.66	.77	.93	2.63	3.11	.59	.39	.10	.04

CAL YR 1982 TOTAL 156037.0 MEAN 427 MAX 4210 MIN 14 CFSM 1.32 IN 17.97
WTR YR 1983 TOTAL 103361.9 MEAN 283 MAX 6380 MIN 9.0 CFSM .88 IN 11.90

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'24", in NE¼NW¼ sec.35, T.20 N., R.9 W., Warren County, Hydrologic Unit 05120108, on right approach to old U.S. Highway 136 bridge at Covington, 2.9 miles downstream from Opossum Run, 3.6 miles upstream from Spring Creek, and at mile 271.1.

DRAINAGE AREA.--8,218 mi².

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mile downstream January 1927 to December 1930, and at present site since January 1931 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1275: Drainage area. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.97 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--44 years, 7,371 ft³/s, 12.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft³/s May 20, 1943, gage height, 32.44 ft; minimum daily, 487 ft³/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft, from floodmark determined by National Weather Service, discharge, 200,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 67,500 ft³/s May. 4, gage height, 26.31 ft; minimum daily, 1,060 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	2500	13000	24300	4790	4180	9850	13800	5930	7600	1600	1090
2	1710	3680	10600	21100	6020	4000	10900	30100	5610	6760	1580	1130
3	1700	9260	10600	17900	10000	4040	18600	46500	5350	5960	1710	1120
4	1720	12700	15000	15500	13500	3740	2500	64100	5340	6320	1680	1090
5	2170	10900	21700	14300	13000	3750	2600	54000	5380	6240	1500	1060
6	2870	8860	25200	13500	12000	3750	2400	41100	6140	5590	1500	1080
7	3140	7260	27200	12600	10000	3780	21800	33700	7440	5070	1560	1180
8	2870	6230	26200	11300	8000	4110	20000	28400	8300	4280	1390	1180
9	2260	5170	22300	9930	6400	4370	18900	24500	7660	3880	1380	1180
10	2600	5100	18200	8150	5800	4220	17300	20200	6500	3710	1330	1260
11	2640	4720	15100	7350	5200	4100	16900	16800	5700	3240	1390	1350
12	2700	4260	13300	6930	4900	4030	17100	15000	5150	2870	1430	1470
13	2680	4440	11300	6590	4800	3940	17000	14100	4810	2570	1590	1670
14	2440	5270	9580	6270	4700	3700	19400	16200	4360	2440	1340	1730
15	2130	6040	8120	6100	4700	3550	24200	15200	4310	2340	1330	1350
16	1860	5380	8380	6460	4800	3470	28200	14100	4500	2290	1310	1150
17	1760	5080	10200	6700	5000	3340	29100	12900	4000	2190	1440	1100
18	1990	5070	13100	6700	5200	3130	26500	12800	4330	2070	1650	1160
19	2540	5060	12900	5700	6000	3450	22900	13200	4500	2030	1860	1190
20	2750	5070	11900	4950	6300	3840	18900	13100	4020	2010	1550	1170
21	2420	5130	10600	4550	6300	4230	15500	12600	3910	1940	1420	1180
22	2300	5760	9230	4640	6200	4270	12900	12200	3570	2070	1340	1310
23	2290	6490	8500	5280	6060	4300	11600	11600	3470	1930	1240	1280
24	2650	6440	8420	5450	5510	4410	10500	12000	3360	1760	1290	1280
25	2880	6990	12300	5140	5240	4750	9150	12200	3360	1780	1250	1320
26	2880	7430	20800	5030	5250	4870	8230	10900	3240	1680	1180	1250
27	2530	7610	25500	5010	4640	5400	7800	8810	3190	1640	1210	1290
28	2210	8360	28000	5070	4300	8150	7780	7760	3240	1550	1550	1460
29	2040	9880	29400	5010	---	13200	7690	7190	3260	1540	1500	1430
30	2050	13200	29800	4940	---	14100	9550	6710	6190	1480	1300	1400
31	2110	---	27800	4780	---	11900	---	6330	---	1540	1180	---
TOTAL	72890	199340	514230	267230	184610	156070	445750	608100	146120	98370	44580	37910
MEAN	2351	6645	16590	8620	6593	5035	14860	19620	4871	3173	1438	1264
MAX	3140	13200	29800	24300	13500	14100	29100	64100	8300	7600	1860	1730
MIN	1700	2500	8120	4550	4300	3130	2400	6330	3190	1480	1180	1060
CFSM	.29	.81	2.02	1.05	.80	.61	1.81	2.39	.59	.39	.18	.15
IN.	.33	.90	2.33	1.21	.84	.71	2.02	2.75	.66	.45	.20	.17

CAL YR 1982 TOTAL 4268240 MEAN 11690 MAX 56400 MIN 1520 CFSM 1.42 IN 19.32
WTR YR 1983 TOTAL 2775200 MEAN 7603 MAX 64100 MIN 1060 CFSM .93 IN 12.56

03339108 EAST FORK COAL CREEK NEAR HILLSBORO, IN

LOCATION.--Lat 40°06'06", long 87°07'54", in NW¼SW¼ sec.8, T.19 N., R.6 W., Fountain County, Hydrologic Unit 05120108, at center pier on downstream side of bridge on County Road 700 East, 1.5 miles east of Hillsboro, 3.7 miles northwest of Waynetown, and 9.6 miles upstream from mouth.

DRAINAGE AREA.--33.4 mi².

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.76 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--15 years, 38.6 ft³/s, 15.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft³/s May 1, 1983, gage height, 10.47 ft; minimum daily, 3.5 ft³/s Jan. 16, 17, Feb. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	2200	*2680	*10.47

Minimum daily discharge, 3.7 ft³/s Sept. 10.

NOTE.--No gage-height record Dec. 3 to Jan. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	19	33	47	19	19	39	798	21	32	7.4	4.8
2	7.6	36	30	40	225	20	114	1020	20	21	6.6	4.5
3	7.6	35	143	36	106	20	83	225	20	17	6.4	4.3
4	8.6	20	246	33	60	19	53	135	21	17	6.7	4.2
5	11	16	193	31	49	19	44	105	21	15	6.8	4.1
6	12	14	142	29	41	20	44	85	45	14	6.4	4.8
7	24	12	107	28	36	21	64	70	31	13	6.3	5.4
8	16	11	80	26	34	24	49	58	26	13	6.0	4.4
9	13	11	61	26	33	21	45	50	23	12	5.7	4.1
10	12	11	49	27	31	19	43	43	19	12	5.4	3.7
11	11	11	39	26	29	18	41	39	17	12	31	4.0
12	11	15	34	24	28	17	38	35	17	11	8.6	4.8
13	11	16	31	23	27	17	52	31	17	10	7.1	4.8
14	10	14	29	22	28	18	227	37	17	9.8	6.6	4.1
15	10	13	28	21	28	17	91	49	31	9.6	6.5	4.1
16	9.1	12	62	20	30	17	56	38	20	9.3	6.2	4.7
17	9.1	11	52	19	29	17	48	33	17	9.2	12	4.8
18	9.1	11	43	18	30	18	41	30	16	10	7.8	4.5
19	9.5	11	35	16	29	25	39	30	25	9.0	6.2	4.6
20	14	10	31	15	28	33	37	29	25	8.7	5.8	7.6
21	15	37	28	18	27	29	33	28	21	8.3	5.5	6.3
22	14	29	25	21	25	27	31	31	17	7.8	5.5	5.2
23	13	22	24	20	24	25	29	80	15	7.5	5.9	4.8
24	12	23	35	18	23	25	28	39	15	8.1	5.8	4.8
25	12	22	232	18	22	24	26	34	14	7.2	5.6	4.8
26	12	28	148	17	20	25	25	32	13	7.1	5.6	4.8
27	12	36	118	16	20	35	26	31	21	6.9	5.6	4.8
28	11	74	166	15	16	52	200	33	25	6.9	7.6	4.5
29	11	48	102	15	---	43	72	34	45	6.6	5.5	4.5
30	11	38	73	16	---	41	215	24	100	6.6	5.3	4.5
31	12	---	56	17	---	40	---	22	---	8.8	5.0	---
TOTAL	358.2	666	2475	718	1097	765	1933	3328	735	346.4	224.4	141.3
MEAN	11.6	22.2	79.8	23.2	39.2	24.7	64.4	107	24.5	11.2	7.24	4.71
MAX	24	74	246	47	225	52	227	1020	100	32	31	7.6
MIN	7.6	10	24	15	16	17	25	22	13	6.6	5.0	3.7
CFSM	.35	.67	2.39	.70	1.17	.74	1.93	3.20	.73	.34	.22	.14
IN.	.40	.74	2.76	.80	1.22	.85	2.15	3.71	.82	.39	.25	.16

CAL YR 1982 TOTAL 21306.4 MEAN 58.4 MAX 585 MIN 6.7 CFSM 1.75 IN 23.73
WTR YR 1983 TOTAL 12787.3 MEAN 35.0 MAX 1020 MIN 3.7 CFSM 1.05 IN 14.24

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile upstream from bridge on U.S. Highway 231, 1.0 mile downstream from Walnut Fork Sugar Creek, and at mile 40.4.

DRAINAGE AREA.--509 mi^2.

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 973: 1939(M). WSP 1275: Drainage area. WSP 1335: 1949.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 657.77 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--45 years, 488 ft^3/s, 13.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft^3/s June 28, 1957, gage height, 14.48 ft; minimum daily, 2.4 ft^3/s Sept. 24-27, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 17.3 ft from information by local resident, discharge, about 36,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	unknown	7190	6.05	May 2	0800	*8850	*7.14
Apr. 14	1600	4140	4.35				

Minimum daily discharge, 17 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	39	187	895	204	193	531	1640	298	1050	119	30
2	32	59	176	725	861	196	1180	8140	268	523	78	27
3	32	92	744	594	1850	183	2250	6060	276	335	59	25
4	32	83	2320	496	999	179	1520	3150	485	264	51	23
5	33	59	2200	444	605	179	1070	1940	361	237	46	21
6	35	49	1660	401	465	205	973	1330	1200	199	43	25
7	70	44	1020	384	390	293	1120	1020	1300	166	38	30
8	67	41	703	342	357	284	1100	862	721	144	33	25
9	55	41	526	316	341	247	895	639	488	134	30	23
10	45	39	443	320	312	222	773	529	382	127	28	21
11	40	41	408	320	298	203	678	466	317	120	111	20
12	39	51	349	297	275	189	585	420	283	110	125	20
13	34	70	289	266	257	187	621	469	259	98	66	20
14	36	62	278	264	264	188	3260	432	238	89	46	20
15	34	51	277	260	279	183	2990	396	234	83	39	18
16	34	49	489	217	288	177	1590	358	214	78	37	18
17	34	46	503	200	296	169	1180	314	196	78	64	18
18	34	44	442	178	286	194	938	291	182	73	84	18
19	36	41	393	172	295	236	739	295	287	67	77	17
20	46	46	333	189	290	253	601	317	1320	68	55	20
21	44	74	283	190	270	744	512	278	505	74	43	32
22	39	119	253	216	267	827	452	1360	323	65	37	39
23	36	126	245	241	271	616	414	2920	253	57	34	27
24	34	187	1500	233	257	554	383	1560	211	55	32	23
25	36	134	5900	219	234	519	344	965	184	53	31	21
26	34	126	4500	205	206	498	319	722	165	51	30	20
27	34	187	3300	194	194	673	302	534	155	51	31	20
28	34	276	4300	181	200	1140	557	464	165	49	60	20
29	34	374	1800	189	---	901	709	413	333	47	50	18
30	32	248	1510	215	---	696	601	364	1470	46	49	18
31	34	---	1180	218	---	589	---	332	---	144	36	---
TOTAL	1193	2898	38511	9581	11111	11917	29187	38980	13073	4735	1662	677
MEAN	38.5	96.6	1242	309	397	384	973	1257	436	153	53.6	22.6
MAX	70	374	5900	895	1850	1140	3260	8140	1470	1050	125	39
MIN	32	39	176	172	194	169	302	278	155	46	28	17
CFSM	.08	.19	2.44	.61	.78	.75	1.91	2.47	.86	.30	.11	.04
IN.	.09	.21	2.81	.70	.81	.87	2.13	2.85	.96	.35	.12	.05

CAL YR 1982 TOTAL 264827 MEAN 726 MAX 6660 MIN 32 CFSM 1.43 IN 19.35
WTR YR 1983 TOTAL 163525 MEAN 448 MAX 8140 MIN 17 CFSM .88 IN 11.95

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE¼NE¼ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on downstream side of first pier from left bank of bridge on U.S. Highway 36 at Montezuma, 2.0 miles upstream from Raccoon Creek, 4.9 miles downstream from Sugar Creek, and at mile 240.0.

DRAINAGE AREA.--11,118 mi^2.

PERIOD OF RECORD.--October 1927 to current year. July 1924 to September 1927 (gage height only) in reports of State of Indiana, Department of Natural Resources.

REVISED RECORDS.--WSP 1335: 1929, 1931(M). WSP 1505: 1954. WSP 1915: 1954(m). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 9,788 ft^3/s , 11.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft^3/s May 20, 1943, gage height, 32.83 ft; minimum daily, 571 ft^3/s Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft, from floodmarks, discharge, 230,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78,700 ft^3/s May. 5, gage height, 27.37 ft; minimum daily, 1,400 ft^3/s Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2380	2770	16900	32500	5850	5610	14200	20600	8310	15500	2350	1690
2	2240	3760	14200	28600	7890	5490	15600	42200	7960	13300	2220	1570
3	2130	7060	14700	24400	15800	5370	23500	58600	7670	10100	2130	1570
4	2150	12100	24000	20500	18100	5240	27600	69100	7770	8520	2130	1540
5	2210	12100	29000	18100	17100	5040	29100	77300	7960	8390	2060	1500
6	2910	10100	31300	17000	16200	5230	30000	67400	9100	7680	1910	1450
7	3630	8190	32300	15900	14800	5350	29000	57700	11100	6930	1960	1480
8	3880	7010	32700	14800	12200	5580	27100	46600	11100	6280	1890	1560
9	3500	5950	30800	13100	10200	5850	25200	37800	10700	5480	1730	1510
10	3200	5440	26400	11800	9040	5920	23300	30900	9250	5270	1690	1520
11	3360	5300	21900	10300	8190	5670	21800	25900	8070	4790	1680	1600
12	3360	4920	18600	9450	7490	5440	21100	22800	7380	4390	2030	1670
13	3620	4950	15800	8900	7090	5260	20800	20700	6800	4020	1930	1870
14	3400	5440	13700	8410	6840	5100	27000	21400	6290	3710	1870	2040
15	2940	6320	11700	8090	6750	4920	31800	22000	6170	3570	1690	1910
16	2580	6220	11400	7930	6800	4760	33400	20700	6420	3400	1630	1600
17	2330	5520	13000	8190	6920	4660	35000	19000	6210	3310	1640	1420
18	2280	5310	14900	8000	7250	4480	33900	17300	5670	3130	2090	1400
19	2730	5310	16200	7630	7230	4830	30200	17100	6740	2990	2390	1400
20	3360	5310	15000	6700	7700	6170	25900	17000	6590	2820	2440	1410
21	3410	5490	13300	6300	8030	7730	21400	16900	8140	2730	2090	1460
22	3080	6550	11700	6000	7870	7930	17900	16500	7620	2710	1910	1700
23	2990	7770	10600	6400	7870	7370	15300	17500	6110	2690	1830	1700
24	2980	8050	10900	6720	7560	7370	14000	17400	5440	2470	1720	1620
25	3380	8300	20900	6570	7010	7400	12500	16400	5130	2360	1760	1610
26	3500	8620	34400	6250	6770	7610	11100	15100	4920	2270	1710	1570
27	3380	9220	34900	6080	6430	8030	10300	13000	5070	2160	1670	1550
28	2960	10300	39100	6050	5900	12600	10300	11100	5590	2060	1930	1670
29	2680	13400	41000	5950	---	17400	11900	10300	5250	2030	2280	1750
30	2550	16200	38800	5990	---	18600	13600	9530	9260	2060	2160	1710
31	2610	---	36100	5940	---	16600	---	8870	---	2410	1890	---
TOTAL	91710	222980	696200	348550	256880	224610	663800	864700	219790	149530	60410	48050
MEAN	2958	7433	22460	11240	9174	7245	22130	27890	7326	4824	1949	1602
MAX	3880	16200	41000	32500	18100	18600	35000	77300	11100	15500	2440	2040
MIN	2130	2770	10600	5940	5850	4480	10300	8870	4920	2030	1630	1400
CFSM	.27	.67	2.02	1.01	.83	.65	1.99	2.51	.66	.43	.18	.14
IN.	.31	.75	2.33	1.17	.86	.75	2.22	2.89	.74	.50	.20	.16

CAL YR 1982 TOTAL 6064750 MEAN 16620 MAX 78400 MIN 2040 CFSM 1.50 IN 20.29
WTR YR 1983 TOTAL 3847210 MEAN 10540 MAX 77300 MIN 1400 CFSM .95 IN 12.87

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN

LOCATION.--Lat 39°48'45", long 86°57'14", in NW¼SW¼ sec.22, T.16 N., R.5 W., Putnam County, Hydrologic Unit 05120108, on left bank at downstream side of county road bridge, 1.6 miles upstream from Ramp Creek, 3.1 miles west of Fincastle, and at mile 48.8.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--August 1957 to current year. Prior to October 1963, published as Raccoon Creek near Fincastle.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area. WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--26 years, 141 ft³/s, 13.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s Jan. 26, 1962; maximum gage height, 15.68 ft Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft³/s Sept. 16, 17, and Oct. 5, 6, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft, discharge, 39,900 ft³/s, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (m³/s)
Dec. 26	0300	*3350	*11.22
May 2	1500	2840	9.81

Minimum daily discharge, 3.6 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	7.8	51	187	58	54	141	316	67	197	118	6.1
2	6.8	16	48	156	381	53	313	2100	59	98	35	5.5
3	6.8	21	476	131	562	51	472	914	66	62	21	5.0
4	6.8	15	1030	110	274	50	321	546	76	72	16	4.7
5	6.8	12	749	97	182	50	234	350	64	141	13	4.4
6	6.8	9.5	474	89	140	64	213	252	440	66	12	4.8
7	21	8.3	283	84	119	114	223	209	276	47	11	9.5
8	18	7.6	198	75	108	103	231	194	162	40	8.9	16
9	16	7.4	151	70	101	81	204	149	114	35	7.8	8.2
10	13	7.1	126	71	95	72	181	130	89	32	7.0	5.6
11	11	13	113	71	95	66	159	115	76	32	18	4.7
12	11	22	93	63	91	61	140	106	67	27	68	4.4
13	9.2	25	80	57	83	57	186	108	62	25	28	4.3
14	9.2	19	75	56	83	59	1200	103	56	23	17	4.0
15	9.2	16	71	56	86	57	647	96	56	21	11	3.7
16	8.4	13	78	48	85	53	374	85	51	20	9.1	4.3
17	8.4	11	84	47	88	51	300	75	47	19	13	4.0
18	6.8	8.9	83	45	83	57	243	70	43	17	27	3.9
19	6.8	8.0	82	44	85	67	197	73	248	17	16	3.6
20	11	8.8	72	47	83	81	162	72	112	172	11	4.7
21	12	14	66	51	76	303	137	62	78	54	8.2	7.1
22	7.4	21	60	57	73	250	120	457	56	32	6.9	6.8
23	6.9	34	60	64	74	195	110	339	44	23	6.8	6.1
24	6.6	50	267	61	70	166	102	211	37	19	6.1	5.4
25	6.5	38	1880	57	66	141	88	150	33	17	5.8	5.1
26	6.5	37	1860	54	57	120	81	118	30	14	5.6	4.8
27	6.4	54	733	51	54	168	77	96	26	12	5.9	4.6
28	6.4	70	1290	47	54	262	133	98	25	11	20	4.3
29	6.2	84	590	51	---	205	103	91	39	9.7	20	4.0
30	6.0	64	337	59	---	170	139	76	352	9.6	11	3.9
31	6.6	---	240	58	---	150	---	73	---	48	7.8	---
TOTAL	278.1	722.4	11800	2214	3406	3431	7231	7834	2951	1412.3	571.9	163.5
MEAN	8.97	24.1	381	71.4	122	111	241	253	98.4	45.6	18.4	5.45
MAX	21	84	1880	187	562	303	1200	2100	440	197	118	16
MIN	6.0	7.1	48	44	54	50	77	62	25	9.6	5.6	3.6
CFSM	.07	.17	2.74	.51	.88	.80	1.73	1.82	.71	.33	.13	.04
IN.	.07	.19	3.16	.59	.91	.92	1.94	2.10	.79	.38	.15	.04

CAL YR 1982 TOTAL 72700.9 MEAN 199 MAX 1950 MIN 6.0 CFSM 1.43 IN 19.46
WTR YR 1983 TOTAL 42015.2 MEAN 115 MAX 2100 MIN 3.6 CFSM .83 IN 11.24

03340870 CECIL M. HARDEN LAKE AT FERNDALE, IN

LOCATION.--Lat 39°43'02", long 87°04'20", in SE¼NE¼ sec.28, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, in discharge tower of reservoir on Big Raccoon Creek at Ferndale, 4.4 miles upstream from Rocky Fork Creek, 6.1 miles northeast of Mansfield, and at mile 33.8.

DRAINAGE AREA.--216 mi^2.

PERIOD OF RECORD.--December 1960 to September 1983 (discontinued). Published as "Mansfield Reservoir" prior to October 1970 and as "Mansfield Lake" October 1970 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4 ft wide and 8 ft high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 16,180 acre-ft, elevation, 640 ft. Seasonal pool capacity is 49,300 acre-ft, elevation, 661 ft. Capacity at uncontrolled spillway elevation, 690 ft is 133,000 acre-ft. Reservoir is used for flood control and recreation. Reservoir put in operation on Dec. 6,1960.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 87,510 acre-ft May 4, 1964, elevation, 676.52 ft; minimum, 16,080 acre-ft, many times, elevation, 639.9 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 63,120 acre-ft May 10, elevation, 667.25 ft; minimum, 16,210 acre-ft Jan. 21, elevation, 640.02 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	659.69	46,610	
Oct. 31	649.48	28,640	-17,970
Nov. 30	640.36	16,580	-12,060
Dec. 31	657.55	42,440	+25,860
CAL YR 1982			+25,690
Jan. 31	640.29	16,500	-25,940
Feb. 28	640.15	16,350	-150
Mar. 31	648.64	27,380	+11,030
Apr. 30	660.42	48,070	+20,690
May 31	661.12	49,500	+1,430
June 30	561.51	50,320	+820
July 31	660.90	49,040	-1,280
Aug. 31	660.54	48,310	-730
Sept. 30	659.61	46,450	-1,860
WTR YR 1983			-160

03340900 BIG RACCOON CREEK AT FERNDALE, IN

LOCATION.--Lat 39°41'44", long 87°05'01", in SE¼SW¼ sec.33, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, on right bank 1.1 miles southwest of Ferndale, 1.8 miles northeast of Mansfield, 2.0 miles upstream from Rocky Fork Creek, 2.2 miles downstream from Cecil M. Harden Lake, and at mile 31.6.

DRAINAGE AREA.--222 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Ferndale.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 582.36 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Oct. 1, 1974, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Cecil M. Harden Lake (See sta 03340870). Daily discharge computed from relation between discharge, head, and gate openings for Cecil M. Harden Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--27 years, 229 ft³/s, 14.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s June 28, 1957, gage height, 19.87 ft, from rating curve extended above 5,000 ft³/s on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft³/s Oct. 11, 1956; no flow Aug. 23, 24, 1977, due to regulation.

EXTREMES FOR CURRENT YEAR:--Maximum daily discharge, 1,150 ft³/s May 12, 13; minimum daily, 22 ft³/s Mar. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	278	266	152	87	54	27	113	144	240	28	28
2	48	277	151	153	87	33	28	145	144	398	28	28
3	48	276	126	153	89	22	28	148	144	173	28	28
4	48	275	132	555	90	22	29	149	144	81	28	28
5	48	274	136	1060	682	23	29	149	144	81	28	28
6	190	272	139	1050	979	23	30	149	146	167	28	28
7	358	272	140	1040	674	23	30	150	416	210	28	28
8	558	270	140	1030	244	23	30	150	577	292	28	28
9	522	269	141	1020	244	23	31	150	575	58	28	28
10	519	268	447	1000	244	23	31	150	573	43	28	28
11	837	267	873	991	161	23	31	754	571	36	28	28
12	984	266	345	977	152	23	74	1150	279	28	28	28
13	844	265	746	963	177	24	31	1150	127	28	28	28
14	420	242	937	948	177	24	32	941	81	28	28	28
15	294	263	923	934	177	24	33	648	81	28	28	28
16	294	261	908	919	139	24	33	946	81	28	28	28
17	293	260	892	901	123	24	34	1120	81	28	28	28
18	292	259	874	883	124	24	34	1030	81	28	28	28
19	291	258	702	863	124	24	34	532	81	28	28	28
20	290	256	274	325	124	24	78	148	81	28	28	28
21	289	255	123	101	124	25	141	132	81	28	28	28
22	288	254	123	86	124	25	141	344	81	28	28	28
23	287	253	123	98	124	23	141	572	81	28	28	28
24	286	252	124	111	124	23	141	571	81	28	28	28
25	285	251	132	124	123	26	141	419	81	28	28	28
26	284	250	142	123	123	26	83	239	81	28	28	28
27	283	346	145	123	97	26	48	189	81	28	28	28
28	282	384	148	99	66	26	48	144	81	28	28	28
29	281	443	151	86	---	27	48	144	81	28	28	28
30	280	490	152	86	---	27	48	144	81	28	28	28
31	279	---	152	86	---	27	---	144	---	28	28	---
TOTAL	10356	8506	10807	17040	5803	788	1687	12914	5361	2339	868	840
MEAN	334	284	349	550	207	25.4	56.2	417	179	75.5	28.0	28.0
MAX	984	490	937	1060	979	54	141	1150	577	398	28	28
MIN	48	242	123	86	66	22	27	113	81	28	28	28
CFSM	1.51	1.28	1.57	2.48	.93	.11	.25	1.88	.81	.34	.13	.13
IN.	1.74	1.43	1.81	2.86	.97	.13	.28	2.16	.90	.39	.15	.14

CAL YR 1982 TOTAL 117091 MEAN 321 MAX 1340 MIN 27 CFSM 1.45 IN 19.62
WTR YR 1983 TOTAL 77309 MEAN 212 MAX 1150 MIN 22 CFSM .96 IN 12.95

03341300 BIG RACCOON CREEK AT COXVILLE, IN

LOCATION.--Lat 39°39'09", long 87°17'37", in SW¼SW¼ sec.15, T.14 N., R.8 W., Parke County, Hydrologic Unit 05120108, on right bank at downstream side of covered bridge on county road at Coxville, 0.8 mile upstream from Rock Run, 1.5 miles downstream from Little Raccoon Creek, 2.1 miles northwest of Rosedale, and at mile 13.1.

DRAINAGE AREA.--448 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good. Flow regulated by Cecil M. Harden Lake (See sta 03340870).

AVERAGE DISCHARGE.--27 years, 487 ft³/s, 14.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft³/s June 28, 1957, gage height, 21.23 ft, from rating curve extended above 35,000 ft³/s on basis of an estimate made by slope-area study; minimum daily, 6.5 ft³/s Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,460 ft³/s Dec. 25, gage height, 13.52 ft; minimum daily, 52 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	301	636	786	284	220	325	743	311	292	124	60
2	112	315	402	651	1320	213	725	2690	296	440	97	59
3	105	343	1920	568	1060	183	942	1770	456	411	90	58
4	104	321	3320	542	613	170	619	1200	556	319	87	57
5	102	309	2610	1290	657	166	485	878	395	315	87	56
6	102	303	1800	1360	1300	230	501	701	2000	222	84	58
7	371	299	1100	1360	1250	232	556	603	1040	284	80	69
8	420	297	829	1340	559	219	520	568	965	275	78	60
9	531	294	682	1320	505	199	489	489	849	199	77	56
10	511	292	667	1310	495	189	463	446	789	162	75	55
11	534	301	1070	1290	483	183	425	522	743	143	74	54
12	895	338	1300	1260	387	175	382	1300	625	132	73	55
13	974	351	1270	1240	411	169	618	1400	370	124	71	55
14	657	321	1260	1220	408	166	2980	1420	297	118	70	55
15	382	309	1250	1190	401	161	1420	927	320	115	69	55
16	356	303	1310	1160	386	156	867	924	282	112	68	58
17	341	299	1260	1140	346	152	664	1340	255	108	90	55
18	332	299	1230	1100	334	174	551	1340	238	109	89	53
19	328	297	1160	1010	334	205	473	1080	442	104	71	52
20	341	297	704	659	323	254	434	439	275	99	67	55
21	332	313	427	391	315	605	446	375	243	96	65	66
22	319	332	397	338	313	456	439	944	224	93	64	62
23	315	386	382	339	315	371	418	1090	213	90	64	58
24	311	498	1130	324	303	333	395	878	204	94	71	57
25	307	411	4740	329	292	296	373	792	196	89	66	56
26	303	407	3540	314	281	271	353	522	189	84	64	55
27	301	548	2020	304	265	327	286	459	200	82	65	55
28	299	733	2760	288	241	557	286	414	209	80	93	54
29	299	802	1570	263	---	453	276	391	205	78	76	53
30	299	782	1140	310	---	372	303	348	398	123	65	53
31	299	---	938	285	---	333	---	328	---	320	62	---
TOTAL	11010	11401	44824	25281	14181	8190	18014	27321	13785	5312	2376	1704
MEAN	355	380	1446	816	506	264	600	881	460	171	76.6	56.8
MAX	974	802	4740	1360	1320	605	2980	2690	2000	440	124	69
MIN	102	292	382	263	241	152	276	328	189	78	62	52
CFSM	.79	.85	3.23	1.82	1.13	.59	1.34	1.97	1.03	.38	.17	.13
IN.	.91	.95	3.72	2.10	1.18	.68	1.50	2.27	1.14	.44	.20	.14

CAL YR 1982 TOTAL 285367 MEAN 782 MAX 4740 MIN 83 CFSM 1.75 IN 23.70
WTR YR 1983 TOTAL 183399 MEAN 502 MAX 4740 MIN 52 CFSM 1.12 IN 15.23

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'00", long 87°25'08", in NE¼SW¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at upstream side of Wabash Avenue bridge at Terre Haute, 2.4 miles upstream from Sugar Creek, 4.2 miles downstream from Lost Creek, and at mile 214.4.

DRAINAGE AREA.--12,265 mi².

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 3,300 ft upstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 10,810 ft³/s, 11.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s May 20, 1943, gage height, 30.50 ft; minimum daily, 701 ft³/s Aug. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 31.1 ft, present site and datum, discharge, 245,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79,000 ft³/s May. 6, gage height, 25.26 ft; minimum daily, 1,530 ft³/s Sept. 18, 19, and 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2550	2850	19200	40000	6960	6620	17100	19000	9780	16300	3110	1800
2	2400	3190	17500	37300	8660	6420	18600	33900	9300	16900	2600	1680
3	2290	5180	17800	33800	16500	6220	25900	46200	9240	13000	2420	1670
4	2240	10500	28500	28100	20500	6110	30100	58900	10000	10500	2400	1610
5	2250	12900	33600	23900	20300	5860	32400	72500	9740	9740	2400	1570
6	2440	11500	35400	21500	19200	6110	33800	76600	13200	9060	2260	1540
7	3400	9550	36200	19900	18000	6470	34600	65600	14000	8090	2190	1540
8	4050	8020	36900	18300	15400	6490	33900	54500	13600	7410	2220	1550
9	4170	6900	36800	16400	12700	6660	32300	47200	12900	6510	2070	1550
10	3670	5960	35100	14700	11100	6810	28900	41800	11700	5860	1980	1540
11	3580	5720	29500	13100	10200	6690	27100	36400	10100	5510	1920	1550
12	3720	5500	24900	11900	9300	6410	25300	32000	9080	4920	2040	1600
13	3910	5380	20800	11100	8670	6170	24800	27900	8240	4400	2180	1640
14	4040	5610	17600	10600	8280	5990	30700	26700	7510	4000	2180	1800
15	3440	6270	15100	10200	8090	5800	35000	27100	7170	3730	2050	1890
16	3000	6760	13600	9800	8020	5590	36400	25800	7220	3570	2030	1710
17	2710	6190	14400	9850	8070	5430	37400	23800	7100	3440	2100	1540
18	2550	5770	16000	9780	8230	5340	37900	21600	6540	3360	2240	1530
19	2590	5670	18100	9400	8400	5480	37200	20500	7240	3200	2360	1530
20	3230	5640	17900	8400	8530	6520	34700	20000	7150	3080	2460	1540
21	3810	5700	16000	7550	8990	9930	28900	19800	8230	2990	2250	1580
22	3570	6410	14100	7070	9050	9980	24600	19700	8710	2910	2030	1620
23	3290	7910	12600	7320	8940	9400	20400	20200	7410	2950	1910	1630
24	3160	9140	13100	7820	8840	8910	17600	20400	6240	2850	1860	1610
25	3290	9120	23600	7910	8280	8890	15500	19500	5730	2650	1810	1560
26	3510	9400	35700	7550	7790	8920	13500	18100	5480	2600	1820	1560
27	3540	10300	38600	7270	7600	9280	12200	15900	5250	2530	1740	1530
28	3300	11300	41800	7120	7030	12400	11500	13500	6760	2450	1950	1540
29	3000	14100	43900	7070	---	18000	12400	12200	7980	2290	2180	1630
30	2810	17300	44200	7100	---	20800	13800	11300	10000	2400	2210	1640
31	2770	---	42500	7130	---	19900	---	10400	---	3160	2020	---
TOTAL	98280	235740	811000	438940	301630	259600	784500	959000	262600	172360	66990	48280
MEAN	3170	7858	26160	14160	10770	8374	26150	30940	8753	5560	2161	1609
MAX	4170	17300	44200	40000	20500	20800	37900	76600	14000	16900	3110	1890
MIN	2240	2850	12600	7070	6960	5340	11500	10400	5250	2290	1740	1530
CFSM	.26	.64	2.13	1.16	.88	.68	2.13	2.52	.71	.45	.18	.13
IN.	.30	.72	2.46	1.33	.91	.79	2.38	2.91	.80	.52	.20	.15

CAL YR 1982 TOTAL 6673270 MEAN 18280 MAX 72900 MIN 2240 CFSM 1.49 IN 20.24
WTR YR 1983 TOTAL 4438920 MEAN 12160 MAX 76600 MIN 1530 CFSM .99 IN 13.46

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile downstream from Turtle Creek, and at mile 162.0.

DRAINAGE AREA.--13,161 mi^2.

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft National Geodetic Vertical Datum of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--45 years, 11,820 ft^3/s, 12.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 201,000 ft^3/s May 21, 1943, gage height, 29.36 ft; minimum daily, 858 ft^3/s Sept. 27-30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 26.4 ft, from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77,100 ft^3/s May 8, gage height, 21.60 ft; minimum daily, 1,820 ft^3/s Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3230	3070	17000	49200	7990	7610	18800	18600	11300	11600	3980	2490
2	2900	3160	18200	48700	10100	7270	20100	28000	10600	15700	3850	2250
3	2740	3540	20900	46600	14600	7080	23500	32900	12100	15200	3300	2100
4	2630	5780	33600	43200	18300	6910	25600	37400	16500	12800	3080	2000
5	2570	10700	37000	38000	20000	6840	27200	46300	13300	11000	3030	1970
6	2560	11900	37100	31700	19700	8160	29100	59100	15600	10100	3040	1940
7	3240	10700	36700	26400	18700	8690	30800	72300	18500	9390	2850	1910
8	4120	9180	37000	22700	17300	8100	32300	76500	15700	8580	2740	1880
9	4740	7980	37700	19700	15000	7780	33100	72300	14300	7930	2740	1900
10	4940	7050	38200	17200	13000	7750	33100	65100	13400	7170	2590	1920
11	4120	6360	38200	15400	11700	7720	32100	57500	12100	6680	2450	1880
12	3950	6190	36100	13800	10800	7480	29900	51100	10700	6300	2400	1920
13	4010	6040	31400	12600	9920	7190	28300	44600	9810	5850	2490	1980
14	4160	5960	24800	11900	9340	6970	32600	38200	9030	5210	2620	2050
15	4170	6130	20000	11300	8990	6810	34400	33800	8440	5080	2590	2220
16	3730	6720	17000	10800	8800	6610	34400	31000	8180	4830	2460	2340
17	3340	6950	15500	10400	8730	6410	35000	28400	8120	4630	2430	2190
18	3070	6500	15600	10400	8750	6360	36200	26000	7960	4470	2750	1960
19	2920	6150	16800	10200	8900	6610	37400	23300	7530	4320	2730	1820
20	3050	6080	18000	9750	8970	7410	39000	21600	8240	4150	2760	1820
21	3670	6070	17200	8880	9170	13200	39100	20600	8070	3970	2910	1920
22	4010	6230	15600	8300	9520	12600	36300	20500	9010	3820	2720	2000
23	3820	7110	14100	8150	9500	11300	31100	20500	9050	3710	2460	2090
24	3590	8710	15700	8360	9420	10400	24900	20400	7930	3710	2450	2070
25	3470	9410	26100	8680	9220	9930	20100	20000	7050	3570	2560	2060
26	3570	9400	32900	8590	8720	9770	16700	19000	6600	3350	2300	2000
27	3740	10100	35300	8240	8340	10300	14400	17600	6340	3230	2260	1990
28	3740	11400	39800	7960	8070	12000	13200	16900	6380	3090	2280	1940
29	3540	13200	44200	7830	---	14600	12900	16100	7650	2990	2570	1940
30	3280	14900	46600	8060	---	18100	13900	13500	9230	2900	2620	2030
31	3120	---	48200	8140	---	19700	---	12200	---	3150	2680	---
TOTAL	109740	232670	882500	551140	321550	287660	835500	1061300	308720	198480	84690	60580
MEAN	3540	7756	28470	17780	11480	9279	27850	34240	10290	6403	2732	2019
MAX	4940	14900	48200	49200	20000	19700	39100	76500	18500	15700	3980	2490
MIN	2560	3070	14100	7830	7990	6360	12900	12200	6340	2900	2260	1820
CFSM	.27	.59	2.16	1.35	.87	.71	2.12	2.60	.78	.49	.21	.15
IN.	.31	.66	2.49	1.56	.91	.81	2.36	3.00	.87	.56	.24	.17

CAL YR 1982 TOTAL 7408990 MEAN 20300 MAX 82400 MIN 2560 CFSM 1.54 IN 20.94
WTR YR 1983 TOTAL 4934530 MEAN 13520 MAX 76500 MIN 1820 CFSM 1.03 IN 13.95

03342100 BUSSERON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°12'54", long 87°18'41", in NW¼NW¼ sec.21, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 900 North, 1.3 miles upstream from East Fork Busseron Creek, 1.9 miles northwest of Hymera, 4.1 miles upstream from West Fork Busseron Creek, and at mile 30.3.

DRAINAGE AREA.--16.7 mi^2.

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1969. Datum of gage is 480.00 ft National Geodetic Vertical Datum of 1929 (U.S. Soil Conservation Service benchmark).

REMARKS.--Records fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--17 years, 19.3 ft^3/s, 15.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft^3/s Sept. 12, 1974, gage height, 18.58 ft; maximum gage height, 19.16 ft July 8, 1982; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,490 ft^3/s Dec. 3, gage height, 18.55 ft. No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.00	13	32	30	2.6	37	195	4.3	.91	.58	.23
2	.00	.23	30	22	157	2.3	149	445	3.7	.80	.14	.08
3	.00	.35	741	17	80	2.1	93	173	281	.64	.04	.03
4	.00	.14	615	15	52	2.0	56	80	91	.80	.04	.00
5	.00	.07	246	13	35	3.4	58	58	62	.68	.04	.00
6	.46	.02	97	12	25	46	67	44	170	.56	.02	.00
7	7.0	.11	65	9.5	19	18	68	31	72	.53	.00	.00
8	4.4	.18	47	8.1	19	12	39	22	52	.50	.00	.10
9	12	.09	31	7.6	13	10	68	16	36	.49	.00	.03
10	8.1	.13	20	7.3	11	8.8	49	13	24	.46	.00	.00
11	4.4	.31	15	6.8	11	7.7	29	12	15	.37	.00	.00
12	2.8	2.3	11	6.1	8.5	6.9	20	13	12	.35	.00	.16
13	1.8	1.7	8.4	6.8	7.1	6.3	148	15	11	.32	.00	.39
14	1.1	1.3	6.8	5.2	6.6	5.8	387	33	8.9	.31	.00	.20
15	.77	.98	8.4	4.6	6.0	5.2	90	25	7.2	.31	.00	.08
16	.32	.86	12	4.0	5.7	5.0	63	17	5.9	.28	.00	.03
17	.10	.76	9.1	3.7	5.3	4.9	48	13	5.1	.26	.00	.02
18	.08	.75	7.7	3.3	5.0	7.1	34	12	4.6	.20	.02	.02
19	.05	.34	6.7	2.8	4.9	8.2	23	12	3.7	.18	.00	.00
20	.43	1.0	5.6	2.7	4.4	97	16	10	3.3	.17	.00	.03
21	.10	1.2	4.7	3.5	4.1	88	14	8.8	2.9	.16	.00	.11
22	.07	1.1	4.6	13	4.0	49	12	26	2.1	.14	.00	.05
23	.07	11	4.9	14	3.8	33	11	13	1.8	.13	.00	.00
24	.04	9.2	170	13	3.3	23	10	8.8	1.6	.15	.00	.00
25	.02	6.4	466	12	2.6	17	8.8	7.1	1.4	.13	.00	.00
26	.00	12	115	11	2.2	15	8.3	5.7	1.2	.12	.00	.00
27	.00	12	186	9.2	2.3	65	8.0	4.8	1.1	.08	.00	.00
28	.00	52	183	8.1	2.9	54	7.7	15	1.1	.08	.00	.00
29	.00	27	84	9.8	---	33	7.2	8.9	1.0	.24	.29	.00
30	.00	16	64	19	---	23	78	6.4	1.3	2.0	.51	.00
31	.02	---	47	13	---	14	---	5.2	---	.42	.33	---
TOTAL	44.39	159.52	3324.9	315.1	530.7	675.3	1707.0	1348.7	888.2	12.77	2.01	1.56
MEAN	1.43	5.32	107	10.2	19.0	21.8	56.9	43.5	29.6	.41	.065	.052
MAX	12	52	741	32	157	97	387	445	281	2.0	.58	.39
MIN	.00	.00	4.6	2.7	2.2	2.0	7.2	4.8	1.0	.08	.00	.00
CFSM	.09	.32	6.41	.61	1.14	1.31	3.41	2.61	1.77	.03	.004	.003
IN.	.10	.36	7.41	.70	1.18	1.50	3.80	3.00	1.98	.03	.00	.00

CAL YR 1982 TOTAL 12881.51 MEAN 35.3 MAX 770 MIN .00 CFSM 2.11 IN 28.69
WTR YR 1983 TOTAL 9010.15 MEAN 24.7 MAX 741 MIN .00 CFSM 1.48 IN 20.07

03342150 WEST FORK BUSSERON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°11'10", long 87°19'44", in NW¼NW¼ sec.32, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on State Highway 48, 1.4 miles upstream from mouth, 1.5 miles west of Hymera, and 3.7 miles east of U.S. Highway 41.

DRAINAGE AREA.--14.4 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records poor.

AVERAGE DISCHARGE.--17 years, 14.1 ft³/s, 13.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s July 26, 1973, gage height, 13.23 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	1900	*1300	*12.33	June 3	1945	829	11.60
Dec. 25	1300	808	11.56	June 6	0745	524	10.80
May 2	0845	808	11.56				

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.80	21	10	35	1.9	9.2	250	4.1	2.2	1.2	.01
2	.58	1.3	50	9.3	115	1.7	94	303	5.3	.64	.35	.01
3	.60	1.5	689	8.0	56	1.5	60	130	328	.42	.03	.03
4	.54	1.2	366	6.6	30	1.4	35	29	54	1.2	.00	.03
5	.45	1.0	162	6.8	25	2.5	38	17	21	1.8	.00	.09
6	3.0	.90	38	6.8	17	67	42	13	175	.83	.00	.09
7	16	1.1	20	6.6	14	15	35	13	18	.60	.00	.14
8	6.8	1.3	14	5.3	10	10	25	12	8.2	.51	.00	.06
9	23	1.0	11	5.3	7.2	7.6	48	8.9	5.6	.48	.00	.06
10	9.9	1.1	10	5.8	7.8	6.6	23	7.8	4.2	.41	.00	.03
11	6.2	1.3	9.8	5.3	7.2	5.6	17	7.2	3.5	.37	.00	.03
12	4.5	3.0	8.7	4.6	5.5	5.0	12	7.8	3.1	.29	.00	.03
13	3.5	2.0	5.8	4.1	5.0	4.5	50	13	3.9	.28	.00	.00
14	2.8	1.5	5.8	4.4	4.8	4.2	240	25	3.8	.21	.00	.00
15	2.4	1.0	9.3	4.3	4.4	3.8	80	23	4.6	.23	.00	.00
16	1.9	.90	21	3.5	4.2	3.6	40	12	3.9	.21	.01	.00
17	1.2	.86	11	3.0	3.9	3.5	25	8.2	3.5	.21	.03	.00
18	1.0	.80	9.3	2.4	3.6	5.2	16	8.0	2.7	.17	.06	.00
19	.90	.84	8.9	2.1	3.5	10	12	11	6.2	.16	.06	.00
20	1.7	.99	8.2	2.2	3.2	60	10	8.7	5.5	.15	.06	.00
21	1.2	.99	6.4	3.2	3.0	50	8.2	7.2	2.9	.14	.09	.00
22	1.0	.99	6.0	15	2.9	35	7.0	23	1.8	.11	.06	.00
23	1.0	6.4	6.4	17	2.7	23	6.2	9.3	1.3	.08	.06	.00
24	.90	6.8	227	13	2.4	15	5.5	6.4	.99	.18	.09	.00
25	.88	3.0	421	12	2.0	11	4.9	4.9	.81	.14	.09	.00
26	.76	6.0	43	8.0	1.6	9.2	4.6	4.4	.64	.09	.06	.00
27	.60	16	40	6.8	1.7	40	4.3	3.8	.56	.06	.03	.00
28	.50	48	44	6.2	2.0	32	4.6	24	.81	.06	.23	.00
29	.62	17	22	7.8	---	23	4.6	10	.72	.06	.03	.00
30	.58	19	15	17	---	15	103	5.3	2.6	1.6	.03	.00
31	.88	---	12	11	---	10	---	4.3	---	2.9	.03	---
TOTAL	96.41	148.57	2321.6	223.4	380.6	483.8	1064.1	1010.2	677.23	16.79	2.60	.61
MEAN	3.11	4.95	74.9	7.21	13.6	15.6	35.5	32.6	22.6	.54	.084	.020
MAX	23	48	689	17	115	67	240	303	328	2.9	1.2	.14
MIN	.45	.80	5.8	2.1	1.6	1.4	4.3	3.8	.56	.06	.00	.00
CFSM	.22	.34	5.20	.50	.94	1.08	2.47	2.26	1.57	.04	.006	.001
IN.	.25	.38	6.00	.58	.98	1.25	2.75	2.61	1.75	.04	.01	.00

CAL YR 1982 TOTAL 9295.82 MEAN 25.5 MAX 689 MIN .12 CFSM 1.77 IN 24.01
WTR YR 1983 TOTAL 6425.91 MEAN 17.6 MAX 689 MIN .00 CFSM 1.22 IN 16.60

03342244 MUD CREEK NEAR CASS, IN

LOCATION.--Lat 39°05'55", long 87°15'46", in NE¼NE¼ sec.35, T.8 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on left upstream wingwall of bridge on County Road 100 North, 1.0 mile northeast of Cass, and 2.9 miles above mouth.

DRAINAGE AREA.--9.16 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.73 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow affected by surface-mined areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s Dec. 25, 1982, gage height, 10.89 ft; minimum daily, 0.87 ft³/s Sept. 15, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 441 ft³/s Dec. 25, gage height, 10.89 ft; minimum daily, 0.87 ft³/s Sept. 15.

NOTE.--No gage-height record Oct. 15 to Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.5	16	13	23	5.9	19	180	19	3.3	5.3	1.1
2	3.4	3.7	16	11	71	5.4	66	126	34	3.1	2.2	1.1
3	2.9	4.5	249	11	21	5.2	39	59	70	2.9	2.0	1.1
4	3.2	3.9	100	9.6	13	5.2	18	33	35	25	1.7	1.1
5	5.0	3.3	68	9.7	11	9.3	16	21	15	7.2	1.9	1.1
6	3.9	3.0	29	9.6	9.5	39	21	17	40	3.4	1.7	1.2
7	26	3.5	16	9.2	8.6	15	26	24	21	2.8	1.6	1.3
8	5.0	3.9	14	8.7	8.9	12	21	16	13	3.1	1.5	1.1
9	39	3.2	12	7.9	10	9.2	27	14	10	2.7	1.4	.94
10	15	3.4	12	8.5	10	8.8	17	13	8.1	2.9	1.4	.98
11	11	3.6	12	8.6	8.0	8.0	14	12	6.6	2.4	2.2	.97
12	8.9	8.0	9.5	7.3	7.1	9.9	13	18	5.7	2.3	1.6	.94
13	10	5.1	8.7	7.9	7.4	7.3	84	23	7.3	2.2	1.4	.98
14	7.0	3.7	9.5	7.5	7.6	7.3	96	60	6.1	2.3	1.4	.92
15	5.6	2.8	14	6.8	7.1	7.4	28	27	5.0	3.5	1.3	.86
16	4.7	2.3	13	5.8	7.1	6.9	18	16	4.4	2.3	1.3	1.1
17	4.1	2.1	10	5.0	7.1	6.7	15	15	4.0	2.1	6.4	1.9
18	3.8	3.6	10	4.5	6.6	12	13	16	4.4	2.0	2.2	1.1
19	3.5	3.1	9.5	4.1	6.2	11	12	14	5.3	1.9	1.6	.89
20	5.3	3.1	9.0	4.8	6.9	41	11	15	4.2	1.9	1.2	1.5
21	3.5	3.4	7.7	7.2	6.3	35	11	19	4.1	1.9	1.2	1.1
22	3.2	3.6	8.6	18	5.9	18	10	20	4.1	2.1	1.1	.91
23	3.1	15	8.9	15	5.8	14	11	16	3.6	2.7	1.2	.94
24	2.9	12	75	14	6.4	12	9.7	16	3.4	1.8	1.6	1.0
25	2.7	8.7	188	11	5.6	11	9.7	14	3.3	1.8	1.2	1.0
26	2.5	24	48	9.5	5.2	13	8.8	17	3.2	1.7	1.1	1.1
27	2.1	19	85	8.5	6.5	38	9.1	21	3.7	1.7	1.7	1.1
28	1.7	57	52	8.4	5.7	29	11	31	4.4	1.5	14	1.1
29	2.5	25	22	11	---	18	13	20	3.5	1.3	2.2	1.1
30	2.1	15	16	16	---	13	110	15	4.1	1.4	1.4	1.1
31	2.7	---	14	10	---	10	---	16	---	2.8	1.2	---
TOTAL	199.2	255.0	1162.4	289.1	304.5	443.5	777.3	924	355.5	100.0	69.2	32.63
MEAN	6.43	8.50	37.5	9.33	10.9	14.3	25.9	29.8	11.9	3.23	2.23	1.09
MAX	39	57	249	18	71	41	110	180	70	25	14	1.9
MIN	1.7	2.1	7.7	4.1	5.2	5.2	8.8	12	3.2	1.3	1.1	.86
CFSM	.70	.93	4.09	1.02	1.19	1.56	2.83	3.25	1.30	.35	.24	.12
IN.	.81	1.04	4.72	1.17	1.24	1.80	3.16	3.75	1.44	.41	.28	.13

CAL YR 1982 TOTAL 6312.50 MEAN 17.3 MAX 303 MIN 1.6 CFSM 1.89 IN 25.63
WTR YR 1983 TOTAL 4912.33 MEAN 13.5 MAX 249 MIN .86 CFSM 1.47 IN 19.95

03342300 BUSSERON CREEK NEAR SULLIVAN, IN

LOCATION.--Lat 39°04'33", long 87°23'11", in SE¼NW¼ sec.2, T.7 N., R.9 W., Sullivan County, Hydrologic Unit 05120111, on left bank at upstream side of bridge on State Highway 54, 1.5 miles southeast of Sullivan, 1.6 miles east of intersection of U.S. Highway 41 and State Highway 54, 1.7 miles upstream from Buttermilk Creek, and at mile 16.7.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records fair, except those for periods of no gage-height record, which are poor. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--17 years, 150 ft³/s, 14.76 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft³/s July 29, 1979, gage height, 16.28 ft; minimum daily, 0.9 ft³/s Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,370 ft³/s Dec. 5, gage height, 15.22 ft; minimum daily, 3.4 ft³/s Aug. 14.

NOTE.--No gage-height record Feb. 11 to Mar. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	198	365	130	41	172	1120	63	21	17	10
2	10	16	217	295	584	39	675	1780	53	18	7.6	6.6
3	9.8	28	811	244	956	38	978	2040	100	16	7.0	3.7
4	10	23	2750	181	415	37	508	1600	881	32	5.2	4.0
5	11	19	3710	122	263	38	319	829	495	53	3.6	5.3
6	11	17	2440	107	210	500	479	463	478	26	5.2	4.5
7	65	24	1520	97	176	410	480	303	680	18	4.7	5.8
8	85	18	894	84	137	210	372	285	264	16	4.5	3.8
9	259	16	554	75	131	160	385	190	187	13	4.3	3.8
10	272	14	375	74	124	120	401	151	132	13	3.8	4.4
11	112	16	309	71	116	110	299	129	97	12	3.7	3.6
12	74	31	243	65	100	92	220	106	74	11	4.3	3.5
13	57	51	197	60	88	82	318	158	63	9.9	3.6	3.9
14	45	30	168	59	82	74	1340	302	55	9.7	3.4	3.7
15	38	23	161	56	78	70	1720	526	45	12	3.5	3.7
16	34	19	189	50	76	64	978	259	39	11	3.7	4.1
17	28	17	136	49	72	58	497	176	33	8.6	6.8	5.6
18	24	18	121	45	65	70	320	142	29	8.6	15	5.8
19	21	18	114	44	60	100	239	138	52	6.5	10	4.7
20	26	18	106	42	56	204	184	126	109	5.8	13	4.7
21	24	20	98	43	52	933	146	99	58	5.5	12	7.8
22	21	22	90	79	50	464	121	130	40	5.2	11	5.5
23	19	39	88	160	50	266	107	132	33	6.3	9.5	5.0
24	17	128	314	150	49	212	97	94	28	6.1	8.8	4.9
25	29	77	1400	129	47	170	85	75	25	6.0	6.6	4.6
26	70	72	2260	110	43	131	79	64	22	5.4	3.8	4.8
27	68	176	1890	94	41	224	74	59	20	5.3	3.6	4.9
28	67	336	1680	86	41	441	72	117	21	5.0	20	4.7
29	37	411	1450	83	---	271	76	159	19	4.4	9.6	4.6
30	12	223	832	230	---	200	183	96	23	4.4	12	4.5
31	12	---	516	161	---	166	---	73	---	9.4	13	---
TOTAL	1578.8	1934	25831	3510	4292	5995	11924	11921	4218	384.1	241.8	146.5
MEAN	50.9	64.5	833	113	153	193	397	385	141	12.4	7.80	4.88
MAX	272	411	3710	365	956	933	1720	2040	881	53	20	10
MIN	9.8	14	88	42	41	37	72	59	19	4.4	3.4	3.5
CFSM	.37	.47	6.04	.82	1.11	1.40	2.88	2.79	1.02	.09	.06	.04
IN.	.43	.52	6.96	.95	1.16	1.62	3.21	3.21	1.14	.10	.07	.04

CAL YR 1982 TOTAL 91591.8 MEAN 251 MAX 3710 MIN 3.7 CFSM 1.82 IN 24.69
WTR YR 1983 TOTAL 71976.2 MEAN 197 MAX 3710 MIN 3.4 CFSM 1.43 IN 19.40

03342500 BUSSERON CREEK NEAR CARLISLE, IN

LOCATION.--Lat 38°58'26", long 87°25'33", in NW¼ survey 17, Vincennes Tract, Sullivan County, Hydrologic Unit 05120111, on left bank 10 ft downstream from bridge on State Highway 58, 1.5 miles northwest of Carlisle, and 7.2 miles upstream from mouth.

DRAINAGE AREA.--228 mi².

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WSP 1335: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 425.36 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to Nov. 8, 1950, nonrecording gage at same site and datum. Nov. 8, 1950, to Oct. 31, 1969, at site 200 ft upstream at same datum.

REMARKS.--Records good. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--40 years, 228 ft³/s, 13.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s Jan. 5, 1950, gage height, 20.05 ft; maximum gage height, 20.30 ft May 9, 1961; no flow many days in 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 6	0100	*4200	*16.92	Apr. 14	1500	2310	13.82
Dec. 28	0300	3430	15.88	May 2	1000	3280	15.64

Minimum daily discharge, 6.3 ft³/s Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	27	305	784	303	61	327	1870	95	37	22	15
2	19	32	327	527	1280	59	1100	3030	80	32	17	12
3	19	50	1670	418	1420	56	1410	2910	639	27	13	8.7
4	20	47	3680	333	1100	55	1240	2710	1100	46	13	6.8
5	21	39	3850	236	481	59	639	2240	1040	148	13	9.6
6	22	35	4040	205	343	747	780	1500	707	57	14	10
7	67	32	3350	183	278	602	949	758	842	40	12	11
8	122	39	2470	154	213	324	766	662	436	32	11	12
9	573	32	1620	138	204	223	787	468	286	28	10	10
10	537	32	825	135	194	179	761	347	205	25	8.8	9.9
11	209	31	527	128	184	152	537	249	150	23	7.6	9.6
12	125	68	395	113	156	130	374	198	113	22	6.5	8.7
13	92	95	310	103	133	116	727	248	91	21	8.7	8.7
14	75	65	259	100	126	107	2120	534	80	22	9.0	9.6
15	62	51	250	95	120	96	2080	895	67	20	9.6	9.6
16	55	45	326	81	115	90	1950	498	58	22	12	9.3
17	48	43	231	82	108	85	1520	282	51	17	13	10
18	41	41	187	66	100	100	713	214	46	15	21	11
19	37	40	171	64	92	148	408	214	99	15	15	11
20	40	40	147	60	84	371	309	186	251	13	20	10
21	42	44	131	69	79	1240	247	158	97	13	18	14
22	38	49	116	206	77	1110	203	195	60	12	16	18
23	35	66	116	281	77	522	172	209	49	11	14	15
24	32	154	888	258	73	334	149	148	42	13	12	15
25	32	113	2630	225	69	248	123	119	37	13	11	13
26	70	114	2880	179	63	200	108	105	33	13	8.4	11
27	81	270	2950	156	62	511	99	92	29	12	6.3	11
28	78	610	3250	141	62	950	101	236	31	11	18	11
29	72	740	2610	143	---	548	116	275	31	11	20	11
30	30	386	2090	385	---	348	438	153	55	11	12	11
31	24	---	1460	294	---	278	---	112	---	15	16	---
TOTAL	2738	3430	44061	6342	7596	10049	21253	21815	6900	797	407.9	332.5
MEAN	88.3	114	1421	205	271	324	708	704	230	25.7	13.2	11.1
MAX	573	740	4040	784	1420	1240	2120	3030	1100	148	22	18
MIN	19	27	116	60	62	55	99	92	29	11	6.3	6.8
CFSM	.39	.50	6.23	.90	1.19	1.42	3.11	3.09	1.01	.11	.06	.05
IN.	.45	.56	7.19	1.03	1.24	1.64	3.47	3.56	1.13	.13	.07	.05

CAL YR 1982 TOTAL 158849.2 MEAN 435 MAX 4040 MIN 7.3 CFSM 1.91 IN 25.92
WTR YR 1983 TOTAL 125721.4 MEAN 344 MAX 4040 MIN 6.3 CFSM 1.51 IN 20.51

03343000 WABASH RIVER AT VINCENNES, IN

LOCATION.--Lat 38°42'19", long 87°31'14", T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 miles downstream from Maria Creek, 7.5 miles upstream from Embarras River and at mile 129.6 .

DRAINAGE AREA.--13,706 mi^2 .

PERIOD OF RECORD.--October 1929 to current year. Prior to December 1929 monthly discharge only, published in WSP 1305. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887-1904, and continuous since November 1904, collected at site 1.8 miles downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930-31, 1933, 1936. WSP 1909: 1955. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 miles downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.8 miles upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--54 years, 11,976 ft^3/s, 11.87 in/yr .

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s May 22, 23, 1943, gage height, 29.33 ft, at former site 1.8 miles downstream and at present datum; minimum daily, 770 ft^3/s Aug. 4, 5, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 miles downstream and at present datum, from floodmarks, determined by Corps of Engineers, discharge, 255,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 64,100 ft^3/s May 9, gage height 23.52 ft; minimum daily, 2,020 ft^3/s Sep. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3460	3190	17000	45400	8460	7800	20000	22900	12800	10700	3430	2710
2	3010	3220	18200	44900	11400	7360	21000	27000	11800	14600	4130	2530
3	2750	3390	22300	43800	15900	7090	24300	32000	12600	16400	3620	2360
4	2640	4270	32200	41500	19200	6920	26500	35000	19200	15300	3270	2240
5	2550	7930	36700	38600	21300	6820	28000	38000	18400	13100	3150	2190
6	2530	11400	39100	35400	21400	8960	29800	42000	16500	11500	3180	2160
7	2660	11200	40100	31300	20000	10400	31300	50000	21100	10400	3080	2140
8	3950	9810	39900	27000	18600	9270	32400	60900	20500	9300	2950	2100
9	5100	8300	39300	23200	16800	8360	33400	63600	18600	8440	2910	2100
10	6380	7260	38500	20200	14600	8000	33800	61700	17400	7660	2910	2130
11	5390	6440	37500	17800	12900	7910	33400	57000	15300	6940	2800	2140
12	4550	6160	36100	15800	11800	7730	32100	50800	12600	6550	2660	2140
13	4380	6010	33800	14100	10800	7400	31000	45400	11100	6100	2630	2130
14	4420	5820	30000	13000	9980	7130	33900	41300	10000	5660	2780	2160
15	4530	5770	24600	12200	9450	6900	35900	38500	9150	5240	2830	2240
16	4210	6120	20900	11600	9120	6700	36500	35600	8570	4910	2810	2410
17	3710	6630	18200	11100	8940	6470	36700	32800	8470	4690	2760	2430
18	3320	6510	17000	10800	8900	6380	36800	29900	8360	4500	2850	2280
19	3070	6100	17200	10700	8970	6530	36800	27100	8150	4330	3040	2100
20	3010	5880	18100	10300	9110	7100	36400	24300	8570	4210	2980	2030
21	3340	5840	18200	9590	9170	13300	35900	22300	8490	4070	3050	2020
22	4010	5870	17100	9000	9540	16100	35200	21600	8650	3920	3120	2050
23	4130	6300	15700	8890	9710	14600	33400	21400	9400	3780	2910	2140
24	3870	7680	16000	8800	9590	13200	29700	21100	8730	3730	2700	2200
25	3670	9200	26700	9020	9440	11500	24400	20900	7600	3740	2700	2180
26	3600	9530	33800	9050	9010	10500	19800	20200	6910	3500	2590	2150
27	3830	10000	36700	8680	8500	11000	16800	19000	6540	3350	2420	2120
28	3950	11900	40800	8280	8210	13300	14900	18000	6350	3240	2460	2120
29	3880	13800	43700	8040	---	14700	14000	18800	7150	3150	2510	2090
30	3570	15300	45300	8580	---	17400	14900	16400	9450	3060	2670	2100
31	3310	---	45700	8700	---	19600	---	14400	---	3120	2730	---
TOTAL	116780	226830	916400	575330	340800	306430	869000	1029900	348440	209190	90630	65890
MEAN	3767	7561	29560	18560	12170	9885	28970	33220	11610	6748	2924	2196
MAX	6380	15300	45700	45400	21400	19600	36800	63600	21100	16400	4130	2710
MIN	2530	3190	15700	8040	8210	6380	14000	14400	6350	3060	2420	2020
CFSM	.28	.55	2.16	1.35	.89	.72	2.11	2.42	.85	.49	.21	.16
IN.	.32	.62	2.49	1.56	.92	.83	2.36	2.80	.95	.57	.25	.18

CAL YR 1982 TOTAL 7340740 MEAN 20110 MAX 75000 MIN 2530 CFSM 1.47 IN 19.92
WTR YR 1983 TOTAL 5095620 MEAN 13960 MAX 63600 MIN 2020 CFSM 1.02 IN 13.83

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SE¼NW¼ Hackley Reserve, Delaware County, Hydrologic Unit 05120201, on right bank 200 ft downstream from Walnut Street bridge in Muncie, 6 miles upstream from Bell Creek, and at mile 315.8.

DRAINAGE AREA.--241 mi².

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available in the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft National Geodetic Vertical Datum of 1929 (city of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--Records good. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. above gage. Records of diversion available since October 1937.

AVERAGE DISCHARGE.--52 years (1931 to current year), 207 ft³/s, 11.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s Apr. 21, 1964, gage height, 14.98 ft present datum; maximum gage height, 21.07 ft Jan. 15, 1937, present datum; minimum daily discharge, 1.1 ft³/s Sept. 16, 17, 23-25, 1954, and Oct. 10, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft in March 1913, present datum, discharge, 20,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,450 ft³/s May 2, gage height, 7.57 ft, no peak above base of 2,500 ft³/s; minimum daily, 5.5 ft³/s Sept. 1-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	15	66	179	105	47	70	522	77	312	15	5.5
2	8.5	24	56	145	255	47	153	1930	72	176	21	5.5
3	8.9	30	56	121	588	47	440	1820	70	112	11	5.5
4	9.0	32	72	104	356	43	316	1160	71	96	8.4	5.5
5	8.2	24	105	91	277	44	226	664	66	157	9.0	5.5
6	8.3	21	94	85	176	46	195	452	61	100	8.1	5.5
7	8.4	19	84	81	138	44	432	355	58	63	7.8	5.6
8	8.6	17	66	74	112	43	561	419	51	50	7.2	5.6
9	13	15	56	68	97	43	476	406	48	43	6.5	6.7
10	12	17	51	68	84	40	530	301	45	40	5.6	7.3
11	9.3	22	51	67	80	38	456	241	42	34	6.3	7.3
12	8.6	27	46	63	73	35	366	209	41	29	14	7.3
13	8.8	22	36	57	67	36	302	186	39	25	17	7.0
14	8.9	33	44	56	61	34	934	171	34	22	11	6.8
15	8.7	23	50	55	62	34	1430	164	36	21	8.0	6.8
16	9.2	20	105	54	68	32	688	153	35	21	7.4	7.1
17	12	18	150	45	79	32	450	132	33	19	11	7.7
18	11	18	113	40	78	34	346	120	33	16	9.1	8.8
19	9.7	13	100	38	73	38	274	122	324	15	8.0	8.6
20	11	17	105	37	67	42	223	113	255	21	7.9	7.9
21	11	30	95	37	61	126	194	105	173	15	7.8	9.7
22	13	44	82	58	59	195	168	134	120	7.8	7.5	10
23	13	73	76	87	58	135	150	141	94	7.2	7.7	13
24	14	84	97	134	57	103	139	128	73	7.5	7.8	12
25	13	67	154	134	54	83	124	121	64	13	7.6	12
26	13	58	270	111	49	71	116	119	56	15	7.3	11
27	15	52	327	96	46	71	108	105	48	14	6.8	11
28	15	82	1040	84	45	79	126	100	48	8.0	6.5	10
29	15	126	735	78	---	81	120	96	53	7.4	6.4	10
30	12	91	364	90	---	70	139	90	85	6.9	6.0	10
31	16	---	234	112	---	67	---	81	---	7.5	5.6	---
TOTAL	340.0	1134	4980	2549	3325	1880	10252	10860	2305	1481.3	276.3	242.2
MEAN	11.0	37.8	161	82.2	119	60.6	342	350	76.8	47.8	8.91	8.07
MAX	16	126	1040	179	588	195	1430	1930	324	312	21	13
MIN	7.9	13	36	37	45	32	70	81	33	6.9	5.6	5.5
CFSM	.05	.16	.67	.34	.49	.25	1.42	1.45	.32	.20	.04	.03
IN.	.05	.18	.77	.39	.51	.29	1.58	1.68	.36	.23	.04	.04

CAL YR 1982 TOTAL 85524.9 MEAN 234 MAX 2200 MIN 7.0 CFSM .97 IN 13.20
WTR YR 1983 TOTAL 39624.8 MEAN 109 MAX 1930 MIN 5.5 CFSM .45 IN 6.12

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW¼SE¼ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mile upstream from Muncie Water Works Co. pumping station, 4.2 miles southeast of court house in Muncie, and at mile 10.6.

DRAINAGE AREA.--35.5 mi^2.

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1909: 1955, 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 944.67 ft National Geodetic Vertical Datum of 1929. Prior to May 5, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--29 years, 35.8 ft^3/s, 13.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft^3/s Apr. 21, 1964, gage height, 13.96 ft; minimum daily, 4.7 ft^3/s Jan. 17, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft, from information by local residents. Date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	1400	*481	*8.25

Minimum daily discharge, 9.7 ft^3/s Sept. 15, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	27	42	30	18	24	175	25	57	16	12
2	13	14	25	39	74	18	41	329	24	35	15	11
3	13	17	26	36	62	18	53	192	24	29	14	11
4	13	15	38	34	41	18	41	121	24	33	15	11
5	13	14	43	33	32	18	36	90	23	32	14	11
6	13	13	42	33	30	20	37	70	23	26	14	11
7	14	13	32	33	28	19	105	58	23	24	14	16
8	16	13	28	31	27	19	72	67	22	23	13	11
9	15	14	25	30	26	19	80	51	21	22	12	10
10	15	13	24	31	25	18	73	45	21	21	12	10
11	14	14	24	31	24	18	68	41	20	21	15	10
12	14	17	21	29	22	18	55	38	20	20	13	10
13	14	15	20	28	21	17	50	37	20	20	12	10
14	14	13	20	28	22	18	174	35	20	18	12	10
15	14	13	24	28	23	17	105	35	20	18	12	9.7
16	14	13	51	27	24	17	66	33	20	18	12	10
17	14	13	39	25	23	18	54	31	19	17	13	10
18	14	13	31	23	23	20	44	30	56	18	13	10
19	14	13	32	21	22	19	38	31	94	21	12	9.7
20	15	14	32	22	21	22	35	29	47	22	12	10
21	15	18	28	23	20	47	32	28	35	18	11	11
22	15	17	26	29	20	36	30	34	30	17	11	11
23	14	22	27	34	21	31	29	31	28	17	12	11
24	15	24	30	35	20	28	28	28	26	26	12	11
25	14	18	62	32	19	26	27	29	25	19	11	10
26	14	19	66	30	18	25	25	28	23	17	11	10
27	14	21	120	29	18	25	25	27	23	16	11	10
28	14	40	144	28	18	27	27	27	24	15	12	10
29	14	40	84	27	---	25	25	27	37	15	12	10
30	14	31	57	30	---	24	37	25	81	15	11	11
31	15	---	48	29	---	24	---	25	---	17	12	---
TOTAL	437	528	1296	930	754	687	1536	1847	898	687	391	318.4
MEAN	14.1	17.6	41.8	30.0	26.9	22.2	51.2	59.6	29.9	22.2	12.6	10.6
MAX	16	40	144	42	74	47	174	329	94	57	16	16
MIN	13	13	20	21	18	17	24	25	19	15	11	9.7
CFSM	.40	.50	1.18	.85	.76	.63	1.44	1.68	.84	.63	.36	.30
IN.	.46	.55	1.36	.97	.79	.72	1.61	1.94	.94	.72	.41	.33

CAL YR 1982 TOTAL 16723.0 MEAN 45.8 MAX 395 MIN 13 CFSM 1.29 IN 17.52
WTR YR 1983 TOTAL 10309.4 MEAN 28.2 MAX 329 MIN 9.7 CFSM .79 IN 10.80

03348000 WHITE RIVER AT ANDERSON, IN

LOCATION.--Lat 40°06'20", long 85°40'16", in NW¼NW¼ sec.18, T.19 N., R.8 E., Madison County, Hydrologic Unit 05120201, on downstream side of abandoned Twelfth Street bridge abutment, 250 ft upstream from municipal water-supply plant in Anderson, 1 mile upstream from Killbuck Creek, and at mile 293.3.

DRAINAGE AREA.--406 mi².

PERIOD OF RECORD.--July 1925 to September 1926, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 950 ft downstream December 1910 to February 1918, 250 ft downstream from February 1918 to Sept. 14, 1973, and at present site since Sept. 15, 1973, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Anderson.

REVISED RECORDS.--WSP 1335: 1932, 1934-35, 1936(M), 1938-40. WSP 1385: 1950(P). WSP 1725: 1956 (P). WSP 1909: 1956. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.02 ft National Geodetic Vertical Datum of 1929. Prior to May 12, 1934, nonrecording gage at present site and datum. May 12, 1934, to Sept. 14, 1973, nonrecording gage at site 250 ft downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Records good.Prior to Sept. 15, 1973, the City of Anderson diverted water for its municipal supply above the gage then in use.

AVERAGE DISCHARGE.--53 years, 378 ft³/s, 12.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s Apr. 21, 1964, gage height, 19.41 ft; maximum gage height, 19.96 ft June 14, 1958; minimum daily discharge, 9.1 ft³/s Sept. 24, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23.6 ft Mar. 25, 1913, at site 250 ft downstream and at present datum, based on determination of National Weather Service at site then in use, discharge, 28,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	2000	*3760	*10.02

Minimum daily discharge, 34 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	71	196	407	218	146	201	804	204	645	72	61
2	61	84	162	336	398	147	289	2800	198	433	67	49
3	61	124	150	296	979	149	691	3120	189	278	72	51
4	64	94	225	258	730	149	641	2170	194	231	70	55
5	66	85	262	242	444	149	480	1420	185	320	81	52
6	62	76	258	228	366	164	416	975	174	269	66	49
7	62	71	230	219	313	172	615	738	171	194	64	89
8	67	72	191	206	268	162	1080	715	163	159	69	80
9	71	76	163	193	243	148	853	760	148	145	64	65
10	92	74	152	190	232	139	1060	595	136	136	61	58
11	79	72	150	187	226	130	898	490	128	127	101	44
12	74	103	137	183	219	126	748	426	122	115	96	40
13	71	119	123	177	204	123	628	381	118	108	77	43
14	71	85	129	170	194	124	1150	360	115	99	98	39
15	73	88	126	170	189	125	2330	349	112	91	87	36
16	71	80	244	160	191	122	1360	346	108	84	82	40
17	67	76	301	155	205	120	876	303	105	76	69	47
18	72	76	243	144	209	134	673	280	103	79	105	44
19	74	78	221	140	209	142	547	275	365	100	92	34
20	74	90	222	136	204	146	462	275	660	123	75	50
21	79	111	208	131	190	323	397	255	390	109	66	66
22	73	140	186	150	182	424	348	318	295	88	58	55
23	74	156	176	193	183	336	320	321	214	89	58	47
24	71	184	227	238	181	267	301	285	186	117	60	49
25	72	164	411	265	174	233	279	278	158	111	58	50
26	72	146	665	242	164	209	262	279	142	87	55	49
27	65	137	668	209	155	204	259	246	126	79	57	48
28	64	152	1640	190	150	224	291	230	112	73	53	43
29	64	275	1540	187	---	221	284	226	206	70	61	42
30	63	246	809	197	---	208	302	218	216	66	62	40
31	63	---	530	206	---	199	---	214	---	91	64	---
TOTAL	2158	3405	10945	6405	7620	5665	19041	20452	5743	4792	2220	1515
MEAN	69.6	114	353	207	272	183	635	660	191	155	71.6	50.5
MAX	92	275	1640	407	979	424	2330	3120	660	645	105	89
MIN	61	71	123	131	150	120	201	214	103	66	53	34
CFSM	.17	.28	.87	.51	.67	.45	1.56	1.63	.47	.38	.18	.12
IN.	.20	.31	1.00	.59	.70	.52	1.74	1.87	.53	.44	.20	.14

CAL YR 1982 TOTAL 167875 MEAN 460 MAX 3630 MIN 61 CFSM 1.13 IN 15.38
WTR YR 1983 TOTAL 89961 MEAN 246 MAX 3120 MIN 34 CFSM .61 IN 8.24

03348020 KILLBUCK CREEK NEAR GASTON, IN

LOCATION.--Lat 40°15'45", long 85°30'53", in SE¼SW¼ sec.16, T.21 N., R.9 E., Delaware County, Hydrologic Unit 05120201, on right bank 30 ft upstream from bridge on County Road 500 North, 3.6 miles southwest of Gaston, and at mile 15.6.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 873.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 3.0 ft³/s and poor below.

AVERAGE DISCHARGE.--15 years, 25.0 ft³/s, 13.31 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1200 ft³/s June 2, 1980, gage height, 12.70 ft; minimum daily, 0.76 ft³/s Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1600	*255	*9.46

Minimum daily discharge, 1.0 ft³/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.3	6.1	25	9.3	8.5	13	57	12	13	3.5	1.3
2	1.7	3.0	5.3	21	38	8.4	37	222	11	10	3.4	1.3
3	1.8	4.4	5.3	18	62	8.1	78	182	10	8.2	3.2	1.2
4	1.9	4.3	11	16	36	7.9	55	112	11	9.2	3.1	1.1
5	1.9	3.5	16	15	22	7.8	44	71	9.8	12	3.1	1.1
6	2.0	3.2	18	14	19	7.9	46	52	10	8.4	3.1	1.1
7	2.4	3.2	10	13	15	8.4	86	43	9.7	7.0	3.1	1.5
8	2.7	3.2	7.2	12	13	7.9	72	39	8.8	6.5	2.9	1.4
9	2.5	3.1	5.9	11	12	7.2	64	32	8.2	6.1	2.8	1.2
10	2.3	3.1	5.5	11	11	6.7	82	28	7.8	5.8	2.7	1.1
11	2.2	3.2	5.5	11	10	6.5	76	25	7.5	5.5	3.1	1.1
12	2.1	4.0	5.0	9.8	9.5	6.1	61	23	7.2	5.3	3.6	1.1
13	2.0	4.7	4.7	9.0	9.0	5.9	50	21	6.9	4.9	3.5	1.0
14	2.0	4.2	4.6	8.8	9.0	6.1	105	20	6.7	4.7	2.8	1.0
15	1.9	3.6	5.2	8.8	9.0	5.9	88	20	6.6	4.7	2.6	1.0
16	1.9	3.4	17	7.8	15	5.5	56	18	6.5	4.6	2.5	1.1
17	1.8	3.4	15	7.0	17	5.4	47	17	6.1	4.4	2.5	1.4
18	1.8	3.4	10	6.3	16	5.8	39	16	6.1	4.4	2.5	1.2
19	1.7	3.3	9.0	5.8	15	6.3	33	16	13	4.6	2.7	1.1
20	2.4	3.6	9.2	5.8	14	6.3	29	16	21	4.6	2.5	1.1
21	2.2	4.1	8.1	6.2	12	38	25	14	13	4.4	2.2	1.9
22	2.0	6.1	7.2	7.6	12	39	23	18	9.2	4.2	2.0	1.5
23	1.9	5.9	6.9	9.8	12	25	22	20	7.9	4.0	2.0	1.4
24	1.9	7.9	19	12	11	19	20	16	7.2	3.9	1.9	1.2
25	1.8	6.2	75	11	10	16	19	15	6.6	3.9	1.9	1.2
26	1.8	5.3	95	9.8	8.8	14	17	16	6.2	3.9	1.7	1.2
27	1.8	6.2	75	9.0	8.5	14	16	14	5.9	3.7	1.7	1.2
28	1.7	8.1	118	8.2	8.7	17	18	14	12	3.5	1.6	1.1
29	1.7	12	74	8.4	---	16	18	14	22	3.4	1.5	1.1
30	1.8	7.8	45	8.8	---	14	19	13	13	3.3	1.4	1.1
31	2.0	---	32	9.5	---	14	---	13	---	3.4	1.4	---
TOTAL	61.3	139.7	730.7	336.4	443.8	364.6	1358	1197	288.9	175.5	78.5	36.3
MEAN	1.98	4.66	23.6	10.9	15.9	11.8	45.3	38.6	9.63	5.66	2.53	1.21
MAX	2.7	12	118	25	62	39	105	222	22	13	3.6	1.9
MIN	1.7	2.3	4.6	5.8	8.5	5.4	13	13	5.9	3.3	1.4	1.0
CFSM	.08	.18	.93	.43	.62	.46	1.78	1.51	.38	.22	.10	.05
IN.	.09	.20	1.07	.49	.65	.53	1.98	1.75	.42	.26	.11	.05

CAL YR 1982 TOTAL 12636.0 MEAN 34.6 MAX 414 MIN 1.5 CFSM 1.36 IN 18.43
WTR YR 1983 TOTAL 5210.7 MEAN 14.3 MAX 222 MIN 1.0 CFSM .56 IN 7.60

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE¼NE¼ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 103 ft^3/s, 12.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft^3/s June 3, 1980, gage height, 14.78 ft; minimum daily, 4.1 ft^3/s Sept. 14, 15, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft, from floodmark determined by State of Indiana, Department of Natural Resources, discharge, 4,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 26	0700	*1140	*9.10
May 2	2200	991	8.72

Minimum daily discharge, 4.1 ft^3/s Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	8.0	46	145	40	32	41	138	38	78	10	4.8
2	7.1	11	38	119	181	32	138	691	35	49	10	4.8
3	7.1	15	48	99	328	30	362	726	35	33	9.3	4.6
4	6.8	10	213	84	172	29	235	462	36	33	9.6	4.6
5	7.1	9.1	272	75	95	29	171	285	32	55	10	4.3
6	7.2	8.5	250	68	80	30	184	191	39	38	9.5	4.3
7	7.4	8.9	143	67	62	32	317	146	40	26	8.9	6.2
8	7.7	8.8	96	58	56	32	304	120	35	21	8.6	5.1
9	8.8	8.5	73	54	51	29	218	96	30	19	8.3	4.7
10	8.6	9.1	62	55	46	28	224	85	27	17	7.9	4.5
11	8.3	12	57	56	43	27	183	74	25	16	13	4.5
12	8.2	17	47	51	40	25	155	68	24	15	10	4.3
13	7.9	14	37	44	38	24	137	64	25	13	9.0	4.3
14	7.5	11	33	46	38	24	348	63	23	13	8.1	4.1
15	7.1	9.5	37	43	39	24	314	61	22	12	7.9	4.1
16	6.8	8.9	147	37	50	22	184	56	22	12	7.6	4.6
17	6.6	8.8	155	34	75	22	150	49	20	11	8.3	5.5
18	6.5	8.8	107	30	73	25	125	46	20	11	9.0	4.8
19	6.4	8.8	89	28	69	26	105	46	57	15	7.4	4.5
20	8.0	11	78	27	61	27	91	46	86	13	6.7	4.5
21	7.8	14	65	30	54	136	81	41	56	12	5.9	7.0
22	7.5	15	55	35	50	156	73	102	36	11	5.6	6.0
23	7.3	21	55	38	50	100	68	141	29	10	5.6	5.2
24	6.9	35	154	40	45	76	64	96	25	13	5.6	4.9
25	6.8	25	571	39	41	62	60	74	22	12	5.3	4.7
26	6.9	21	963	36	34	52	55	65	21	11	5.1	4.5
27	6.9	29	591	34	32	53	53	55	19	11	5.1	4.4
28	6.5	58	727	32	32	55	57	51	19	10	5.1	4.3
29	6.4	109	534	32	---	45	60	49	91	10	4.8	4.3
30	6.3	68	287	37	---	40	69	45	116	9.7	4.8	4.3
31	7.1	---	194	41	---	40	---	43	---	9.5	4.8	---
TOTAL	224.9	601.7	6224	1614	1975	1364	4626	4275	1105	619.2	236.8	142.7
MEAN	7.25	20.1	201	52.1	70.5	44.0	154	138	36.8	20.0	7.64	4.76
MAX	8.8	109	963	145	328	156	362	726	116	78	13	7.0
MIN	6.3	8.0	33	27	32	22	41	41	19	9.5	4.8	4.1
CFSM	.06	.18	1.78	.46	.62	.39	1.36	1.22	.33	.18	.07	.04
IN.	.07	.20	2.05	.53	.65	.45	1.52	1.41	.36	.20	.08	.05

CAL YR 1982 TOTAL 51658.5 MEAN 142 MAX 1720 MIN 6.3 CFSM 1.26 IN 17.01
WTR YR 1983 TOTAL 23008.3 MEAN 63.0 MAX 963 MIN 4.1 CFSM .56 IN 7.57

03349000 WHITE RIVER AT NOBLESVILLE, IN

LOCATION.--Lat 40°02'50", long 86°01'00", in SE¼SE¼ sec.36, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank at downstream side of Logan Street bridge in Noblesville, 1.5 miles upstream from Cicero Creek, 5.1 miles downstream from dam at Clare, and at mile 263.5.

DRAINAGE AREA.--858 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and after June 1951, and at site 400 ft downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--37 years, 833 ft^3/s, 13.18 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft^3/s Apr. 22, 1964, gage height, 21.31 ft; minimum daily, 44 ft^3/s Sept. 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 3	1500	*6060	*12.61

Minimum daily discharge, 92 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	146	392	1190	395	334	434	882	396	695	180	121
2	131	165	323	932	792	330	667	3260	368	785	163	118
3	124	206	317	775	1910	327	1920	5830	355	504	161	115
4	121	211	662	678	1760	323	1940	4570	354	421	166	111
5	128	178	1010	609	1060	315	1350	2940	342	471	171	108
6	129	164	1150	558	781	337	1160	1840	378	471	171	108
7	139	153	826	534	698	364	1450	1380	398	380	156	123
8	135	146	563	494	606	359	2180	1200	352	316	147	138
9	141	144	439	456	544	338	1910	1170	322	279	147	130
10	150	143	382	447	508	323	2080	1060	296	264	142	113
11	160	141	368	446	481	309	1900	882	279	247	166	106
12	150	164	329	430	457	295	1610	777	264	236	211	103
13	145	224	288	404	436	286	1360	710	253	225	178	97
14	141	201	267	387	422	281	2100	670	249	214	156	95
15	139	166	267	384	421	282	3630	634	242	206	152	94
16	140	168	420	359	432	275	2860	620	235	201	147	96
17	135	156	780	345	467	266	1860	551	227	193	154	100
18	132	152	688	331	490	287	1430	497	227	185	168	98
19	137	152	557	290	488	311	1150	481	790	198	178	92
20	146	171	493	270	463	311	950	481	1430	225	158	93
21	146	189	451	310	438	625	814	445	942	222	145	125
22	142	229	406	345	425	1050	733	766	643	201	137	119
23	139	255	379	380	422	861	680	1210	477	188	141	109
24	136	347	521	389	415	674	639	955	395	236	136	101
25	135	316	2150	433	397	574	596	720	346	211	133	102
26	140	276	3990	431	372	505	558	663	303	198	131	99
27	143	273	3560	402	344	483	532	558	273	180	129	100
28	144	316	4060	370	333	507	571	496	336	175	136	100
29	143	503	4170	348	---	485	586	463	682	171	128	97
30	141	510	2600	357	---	453	589	436	739	166	125	96
31	143	---	1640	377	---	438	---	422	---	180	124	---
TOTAL	4314	6565	34448	14461	16757	12908	40239	37569	12893	8844	4737	3207
MEAN	139	219	1111	466	598	416	1341	1212	430	285	153	107
MAX	160	510	4170	1190	1910	1050	3630	5830	1430	785	211	138
MIN	121	141	267	270	333	266	434	422	227	166	124	92
CFSM	.16	.26	1.30	.54	.70	.49	1.56	1.41	.50	.33	.18	.13
IN.	.19	.28	1.49	.63	.73	.56	1.74	1.63	.56	.38	.21	.14

CAL YR 1982 TOTAL 383576 MEAN 1051 MAX 8230 MIN 121 CFSM 1.23 IN 16.63
WTR YR 1983 TOTAL 196942 MEAN 540 MAX 5830 MIN 92 CFSM .63 IN 8.54

03350700 STONY CREEK NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°01'44", long 85°59'42", in NE¼NE¼ sec.7, T.18 N., R.5 E., Hamilton County, Hydrologic Unit 05120201, on left bank at downstream side of county road bridge, 1.4 miles upstream from mouth, and 1.4 miles southeast of Noblesville.

DRAINAGE AREA.--50.8 mi².

PERIOD OF RECORD.--July 1967 to current year.

REVISED RECORDS.--WDR IN-82-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 749.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 47.4 ft³/s, 12.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s Feb. 23, 1979; maximum gage height, 7.60 ft Jan. 30, 1982; minimum daily discharge, 2.3 ft³/s Aug. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	2000	300	3.96	May 2	1215	*351	*4.24
Dec. 28	0745	300	3.96				

Minimum daily discharge, 3.3 ft³/s Sept. 13, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.6	13	91	22	17	23	103	27	19	6.2	4.1
2	5.7	6.2	12	77	121	16	73	297	25	15	5.6	3.9
3	5.5	9.3	19	58	131	16	134	236	25	12	6.5	4.0
4	5.6	7.6	84	47	88	16	93	181	25	20	6.0	3.7
5	5.8	6.3	82	44	62	16	75	135	22	28	5.4	3.4
6	5.6	6.2	74	41	53	19	70	103	23	15	5.2	3.4
7	6.4	6.2	45	40	45	24	94	87	20	12	4.7	3.9
8	7.4	6.0	34	34	36	22	97	72	18	11	4.2	4.2
9	7.1	5.9	28	32	34	20	83	57	17	10	4.7	3.7
10	6.7	6.0	25	32	32	18	66	51	16	10	4.5	3.5
11	6.2	6.2	24	30	32	17	55	46	15	9.6	8.0	3.4
12	6.9	9.9	21	25	28	16	45	44	15	9.3	7.0	3.4
13	5.8	10	18	23	26	16	40	41	14	8.5	5.5	3.3
14	5.7	8.0	16	22	26	16	160	40	14	8.5	4.9	3.5
15	5.9	7.7	16	22	27	15	130	38	15	8.3	4.6	3.6
16	5.7	7.4	37	19	28	14	105	35	14	8.3	4.5	3.9
17	5.5	7.2	43	17	28	14	85	31	13	7.7	5.0	3.8
18	5.3	7.2	35	15	26	17	70	30	13	7.5	5.6	3.6
19	5.4	7.3	32	14	27	18	60	32	83	7.7	4.8	3.3
20	5.9	8.1	28	13	23	18	52	30	71	11	4.4	3.3
21	6.0	8.1	24	15	21	92	47	26	45	8.2	4.0	4.7
22	5.9	9.5	21	20	21	83	44	93	32	6.9	4.0	4.2
23	5.9	11	22	23	22	50	42	82	26	7.0	5.0	3.9
24	5.9	17	76	23	21	40	40	59	19	9.2	4.4	4.1
25	5.7	12	231	22	19	34	37	50	17	8.6	4.2	3.8
26	5.5	11	231	21	17	29	33	45	15	6.9	3.9	3.6
27	5.4	14	203	19	16	32	34	37	14	6.4	3.7	3.7
28	5.4	24	270	18	17	30	51	35	13	6.4	5.9	3.6
29	5.3	25	174	18	---	24	50	34	24	5.9	4.3	3.8
30	5.2	17	133	21	---	22	52	31	24	5.7	3.8	3.9
31	5.5	---	110	22	---	22	---	29	---	6.0	3.8	---
TOTAL	181.6	292.9	2181	918	1049	803	2040	2210	714	315.6	154.3	112.2
MEAN	5.86	9.76	70.4	29.6	37.5	25.9	68.0	71.3	23.8	10.2	4.98	3.74
MAX	7.4	25	270	91	131	92	160	297	83	28	8.0	4.7
MIN	5.2	5.6	12	13	16	14	23	26	13	5.7	3.7	3.3
CFSM	.12	.19	1.39	.58	.74	.51	1.34	1.40	.47	.20	.10	.07
IN.	.13	.21	1.60	.67	.77	.59	1.49	1.62	.52	.23	.11	.08

CAL YR 1982 TOTAL 22750.4 MEAN 62.3 MAX 566 MIN 5.2 CFSM 1.23 IN 16.66
WTR YR 1983 TOTAL 10971.6 MEAN 30.1 MAX 297 MIN 3.3 CFSM .59 IN 8.03

03351000 WHITE RIVER NEAR NORA, IN

LOCATION.--Lat 39°54'35", long 86°06'20", in NW¼NW¼ sec.20, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, on downstream side of center pier of bridge on 82nd Street, 2 miles east of Nora, 14 miles upstream from Fall Creek, and at mile 247.9.

DRAINAGE AREA.--1,219 mi².

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Prior to October 1948, published as West Fork White River near Nora.

REVISED RECORDS.--WSP 1335: 1930-31, 1934(M), 1936, 1941, 1943, 1945, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 710.94 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 26, 1929 to July 29, 1942, at site 200 ft downstream at same datum. Supplemental water-stage recorder 4.5 miles downstream.

REMARKS.--Records good. Flow slightly regulated by Morse Reservoir.

AVERAGE DISCHARGE.--54 years, 1,095 ft³/s, 12.20 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s May 19, 1943; maximum gage height, 18.65 ft Apr. 23, 1964; minimum daily discharge, 49 ft³/s Sept. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft, from floodmark, determined by Indiana Department of Highways, discharge, 58,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	2200	*8650	*10.60

Minimum daily discharge, 132 ft³/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	160	545	1950	528	472	690	1410	624	882	214	174
2	156	175	436	1630	1020	468	1010	4750	568	1030	193	166
3	152	201	484	1310	2260	462	2520	7990	545	749	182	162
4	146	224	975	1070	2480	454	2830	7400	561	599	188	160
5	146	205	1600	950	1740	451	2190	4550	528	614	188	158
6	149	181	1800	867	1250	518	1900	3080	572	599	186	158
7	163	174	1490	816	1050	559	2050	2360	722	502	183	164
8	160	166	970	763	902	554	2600	2050	686	400	177	166
9	163	164	753	700	803	517	2640	1780	584	355	170	166
10	164	164	607	677	754	475	2690	1610	504	333	170	154
11	166	164	581	673	715	471	2600	1320	460	311	273	145
12	167	214	515	664	675	444	2230	1130	428	284	230	141
13	163	241	424	587	638	408	1990	1020	404	272	217	137
14	164	227	386	565	612	406	2790	972	380	256	185	132
15	162	188	386	591	611	410	4370	941	374	249	178	139
16	162	180	518	508	622	397	3920	872	363	242	179	149
17	162	176	940	486	658	364	2710	799	350	242	205	151
18	158	169	976	469	687	414	2140	729	334	231	216	151
19	155	169	847	405	689	470	1820	707	704	236	218	149
20	163	183	751	387	669	491	1540	749	1500	274	205	143
21	163	204	661	426	635	958	1270	724	1250	259	189	156
22	162	226	587	489	609	1680	1090	1010	843	250	181	172
23	158	295	541	537	615	1510	991	1760	644	231	179	154
24	156	390	763	548	592	1130	941	1780	527	262	205	147
25	155	380	2690	580	586	939	849	1320	460	277	179	145
26	153	339	5210	585	516	831	778	1090	410	237	174	145
27	154	338	5120	545	487	783	757	904	373	213	177	145
28	155	433	5320	498	472	801	856	798	348	202	212	145
29	157	569	5580	475	---	795	875	747	740	193	181	141
30	157	687	3830	496	---	730	939	695	831	188	179	139
31	159	---	2520	508	---	707	---	663	---	200	177	---
TOTAL	4915	7586	48806	21755	23875	20069	56576	57710	17617	11172	5990	4554
MEAN	159	253	1574	702	853	647	1886	1862	587	360	193	152
MAX	167	687	5580	1950	2480	1680	4370	7990	1500	1030	273	174
MIN	146	160	386	387	472	364	690	663	334	188	170	132
CFSM	.13	.21	1.29	.58	.70	.53	1.55	1.53	.48	.30	.16	.13
IN.	.15	.23	1.49	.66	.73	.61	1.73	1.76	.54	.34	.18	.14

CAL YR 1982 TOTAL 545822 MEAN 1495 MAX 11800 MIN 146 CFSM 1.23 IN 16.66
WTR YR 1983 TOTAL 280625 MEAN 769 MAX 7990 MIN 132 CFSM .63 IN 8.56

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW¼SE¼ sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft downstream from 42nd Street bridge in Indianapolis, and at mile 1.6.

DRAINAGE AREA.--17.9 mi².

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 18.4 ft³/s, 13.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft³/s June 26, 1978, gage height, 13.31 ft; minimum daily, 0.47 ft³/s Dec. 2, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1330	537	5.06	July 19	1745	406	4.66
May 2	0445	*585	*5.22				

Minimum daily discharge, 0.50 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.5	6.6	13	13	6.9	18	86	7.6	5.9	8.3	1.2
2	3.2	9.4	7.7	12	67	6.7	77	261	6.8	3.7	3.4	1.1
3	9.1	7.6	64	11	39	6.4	62	79	9.2	3.0	2.3	1.2
4	2.8	2.6	83	9.5	22	6.2	35	37	13	12	15	1.2
5	.77	1.7	76	8.9	17	6.2	27	24	7.6	8.1	6.5	1.1
6	.82	1.5	38	8.5	15	25	32	19	16	3.9	2.9	2.9
7	4.3	1.4	17	8.4	15	15	40	20	9.6	2.9	1.7	14
8	1.7	1.6	13	7.7	14	12	29	22	7.1	2.8	1.4	1.8
9	2.0	1.6	11	7.9	13	9.8	48	14	6.1	2.5	1.2	1.0
10	1.5	1.5	9.8	8.3	14	8.7	38	13	5.8	2.4	1.1	.84
11	1.0	1.6	11	8.2	14	8.3	28	11	5.6	2.3	91	.76
12	.86	26	8.6	7.3	12	7.6	23	11	5.3	2.1	12	.73
13	.83	8.2	7.5	6.6	11	7.2	39	12	4.9	1.9	5.4	.74
14	.83	4.7	6.8	6.5	11	7.1	187	16	4.5	1.9	3.4	.77
15	.81	3.8	10	6.9	11	6.8	41	14	4.5	2.0	2.5	.78
16	.84	3.2	19	5.9	10	6.5	27	12	4.4	2.0	1.9	.78
17	1.0	3.0	11	5.5	9.9	6.3	29	9.9	4.2	2.8	8.6	.88
18	1.5	2.9	9.3	5.2	9.3	15	21	8.9	7.3	3.1	6.3	.79
19	1.8	2.9	9.0	4.8	9.2	16	18	15	25	87	3.0	.72
20	3.6	8.1	7.3	4.5	8.8	28	16	13	7.8	21	2.1	.71
21	2.5	9.9	6.2	5.0	8.5	63	14	9.9	5.2	7.1	1.7	1.4
22	1.5	7.2	5.7	16	8.4	27	13	55	4.0	4.9	1.4	.79
23	1.2	25	9.5	13	8.7	19	13	24	3.6	3.8	1.3	.68
24	1.1	15	86	12	8.3	17	12	15	3.3	14	4.7	.64
25	1.1	5.5	279	10	7.9	14	11	12	3.2	5.0	2.8	.57
26	1.2	10	62	9.0	7.3	13	10	10	3.1	3.9	2.2	.56
27	1.1	10	82	8.6	6.8	22	15	8.6	3.1	2.4	2.5	.55
28	1.1	44	104	7.8	6.9	25	21	12	3.2	2.2	8.2	.52
29	1.2	16	35	7.5	---	17	15	9.9	5.9	1.8	3.3	.50
30	1.2	9.0	21	11	---	15	52	8.2	18	7.5	1.6	.51
31	3.5	---	16	9.5	---	14	---	8.9	---	15	1.3	---
TOTAL	57.56	247.4	1132.0	266.0	398.0	457.7	1011	871.3	214.9	240.9	211.0	40.72
MEAN	1.86	8.25	36.5	8.58	14.2	14.8	33.7	28.1	7.16	7.77	6.81	1.36
MAX	9.1	44	279	16	67	63	187	261	25	87	91	14
MIN	.77	1.4	5.7	4.5	6.8	6.2	10	8.2	3.1	1.8	1.1	.50
CFSM	.10	.46	2.04	.48	.79	.83	1.88	1.57	.40	.43	.38	.08
IN.	.12	.51	2.35	.55	.83	.95	2.10	1.81	.45	.50	.44	.08

CAL YR 1982 TOTAL 7492.46 MEAN 20.5 MAX 292 MIN .77 CFSM 1.15 IN 15.57
WTR YR 1983 TOTAL 5148.48 MEAN 14.1 MAX 279 MIN .50 CFSM .79 IN 10.70

03351400 SUGAR CREEK NEAR MIDDLETOWN, IN

LOCATION.--Lat 40°02'27", long 85°31'30", in NW¼SE¼ sec.5, T.18 N., R.9 E., Henry County, Hydrologic Unit 05120201, on right bank 90 ft upstream from bridge on County Road 750 North, 1 mile southeast of Middletown.

DRAINAGE AREA.--5.80 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR IN-75-1: 1969-74.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 0.20 ft^3/s and poor below.

AVERAGE DISCHARGE.--15 years, 5.85 ft^3/s, 13.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft^3/s April 28, 1975, gage height, 7.72 ft; minimum daily, 0.02 ft^3/s Aug. 30 to Sept. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	1000	*272	*6.17
June 30	1400	146	5.30

Minimum daily discharge 0.05 ft^3/s Sept. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.10	.50	4.9	2.5	1.0	3.3	70	1.2	22	.12	.07
2	.12	.25	.37	4.1	20	1.0	10	121	1.1	7.1	.12	.07
3	.12	.39	.41	3.4	15	.94	14	54	1.2	3.6	.12	.06
4	.12	.36	2.1	3.0	7.0	.89	9.4	29	1.1	4.4	.13	.06
5	.10	.34	4.5	2.8	4.8	.82	7.2	17	.97	4.9	.12	.06
6	.10	.31	4.3	2.3	3.5	1.1	7.1	11	.96	2.3	.11	.07
7	.11	.30	2.0	2.3	3.0	1.2	19	8.4	.99	1.5	.11	.08
8	.13	.29	1.2	1.6	2.6	1.2	12	9.1	.89	1.2	.11	.07
9	.15	.28	.92	1.8	2.4	1.0	16	6.6	.85	1.0	.11	.06
10	.15	.28	.75	1.8	2.2	.97	16	5.6	.76	.98	.11	.06
11	.13	.28	.74	1.5	2.1	.88	17	5.0	.69	.83	.20	.06
12	.11	.44	.57	1.2	2.0	.79	11	4.5	.69	.70	.18	.05
13	.10	.37	.46	1.1	1.9	.75	9.1	4.0	.66	.58	.16	.05
14	.10	.33	.45	1.2	1.9	.75	38	3.7	.61	.52	.15	.05
15	.10	.30	.62	1.1	2.0	.72	22	3.4	.57	.48	.14	.05
16	.09	.29	5.6	.97	2.4	.69	12	2.8	.57	.43	.13	.08
17	.09	.29	3.8	.84	2.6	.69	9.1	2.4	.57	.39	.15	.07
18	.09	.28	3.0	.75	2.4	.86	7.2	2.2	.60	.29	.14	.06
19	.09	.28	3.0	.70	2.4	.89	5.8	2.2	1.5	.36	.13	.06
20	.13	.28	3.7	.70	2.1	1.4	4.9	1.9	3.4	.45	.12	.07
21	.11	.40	2.7	.80	2.0	12	4.3	1.6	1.5	.30	.12	.12
22	.10	.40	2.3	1.2	1.9	6.8	3.8	3.3	1.0	.23	.11	.10
23	.09	.53	2.3	1.8	2.0	4.7	3.6	2.5	.89	.19	.10	.09
24	.09	.48	3.7	2.6	1.9	3.9	3.3	1.7	.89	.27	.10	.08
25	.09	.37	14	2.1	1.6	3.2	2.9	1.7	.89	.23	.10	.08
26	.09	.37	12	1.6	1.3	2.7	2.7	1.5	.82	.19	.09	.07
27	.09	.39	25	1.3	1.1	3.1	2.5	1.4	.75	.17	.09	.07
28	.09	1.4	29	1.1	1.0	3.9	2.6	1.3	1.4	.15	.09	.07
29	.09	1.6	13	1.1	---	3.8	2.3	1.3	7.2	.14	.08	.07
30	.09	.78	7.7	1.6	---	3.6	15	1.3	51	.13	.08	.07
31	.10	---	6.0	2.1	---	3.3	---	1.2	---	.13	.07	---
TOTAL	3.28	12.76	156.69	55.36	97.6	69.54	293.1	382.6	86.22	56.14	3.69	2.08
MEAN	.11	.43	5.05	1.79	3.49	2.24	9.77	12.3	2.87	1.81	.12	.069
MAX	.15	1.6	29	4.9	20	12	38	121	51	22	.20	.12
MIN	.09	.10	.37	.70	1.0	.69	2.3	1.2	.57	.13	.07	.05
CFSM	.02	.07	.87	.31	.60	.39	1.68	2.12	.50	.31	.02	.01
IN.	.02	.08	1.00	.36	.63	.45	1.88	2.45	.55	.36	.02	.01

CAL YR 1982 TOTAL 2190.49 MEAN 6.00 MAX 208 MIN .09 CFSM 1.03 IN 14.05
WTR YR 1983 TOTAL 1219.06 MEAN 3.34 MAX 121 MIN .05 CFSM .58 IN 7.82

03351500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW¼NE¼ sec.5, T.17 N., R.6 E., Hamilton County, Hydrologic Unit 05120201, on right bank 100 ft downstream from bridge on State Highway 238, 0.2 mile downstream from Lick Creek, 2 miles northwest of Fortville, and at mile 26.1.

DRAINAGE AREA.--169 mi^2.

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WSP 1435: 1949(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 787.43 ft National Geodetic Vertical Datum of 1929 (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--42 years, 165 ft^3/s, 13.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft^3/s Apr. 21, 1964, gage height, 9.88 ft; minimum daily, 5.0 ft^3/s Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 3	0600	*2230	*7.19

Minimum daily discharge, 12 ft^3/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	32	84	191	84	63	96	525	91	229	30	18
2	31	36	74	161	169	63	136	1470	85	125	28	18
3	31	43	73	142	343	61	291	1810	86	81	26	15
4	32	42	129	128	233	60	275	876	90	68	25	17
5	32	36	179	118	163	59	217	524	81	103	26	17
6	29	34	203	112	140	66	197	380	80	84	26	16
7	28	34	159	109	129	74	290	307	81	65	24	18
8	35	34	121	102	111	74	384	308	76	54	23	21
9	30	34	101	94	105	70	317	260	72	50	21	17
10	30	32	87	95	103	66	382	216	68	47	19	15
11	28	33	83	94	100	64	365	191	67	45	26	16
12	29	48	76	88	95	60	319	174	63	41	30	16
13	28	63	65	81	88	60	257	163	60	39	26	14
14	28	54	66	79	87	59	384	158	60	37	24	14
15	27	47	62	79	88	57	576	156	59	36	23	15
16	28	45	104	74	87	55	373	150	58	34	21	16
17	28	43	159	73	87	52	296	132	57	34	21	16
18	28	43	129	65	85	59	254	123	55	36	24	17
19	28	45	114	60	82	66	217	121	67	39	25	16
20	29	51	116	63	80	66	186	122	86	55	23	12
21	30	57	113	68	78	169	165	114	82	46	21	20
22	32	67	99	72	76	227	152	136	68	38	19	19
23	31	67	92	85	78	160	141	156	60	34	19	18
24	30	90	114	91	79	128	135	132	56	41	19	18
25	30	84	277	93	72	112	124	115	52	42	19	18
26	30	72	466	88	67	100	115	113	50	36	18	18
27	30	76	391	81	64	98	110	107	48	31	18	18
28	29	91	663	76	63	114	124	101	46	29	23	18
29	29	132	487	73	---	110	132	99	81	28	25	17
30	30	113	312	76	---	101	127	97	103	28	21	16
31	30	---	233	82	---	96	---	95	---	28	19	---
TOTAL	922	1678	5431	2893	3036	2669	7137	9431	2088	1683	712	504
MEAN	29.7	55.9	175	93.3	108	86.1	238	304	69.6	54.3	23.0	16.8
MAX	35	132	663	191	343	227	576	1810	103	229	30	21
MIN	27	32	62	60	63	52	96	95	46	28	18	12
CFSM	.18	.33	1.04	.55	.64	.51	1.41	1.80	.41	.32	.14	.10
IN.	.20	.37	1.20	.64	.67	.59	1.57	2.08	.46	.37	.16	.11

CAL YR 1982 TOTAL 70193 MEAN 192 MAX 1700 MIN 27 CFSM 1.14 IN 15.45
WTR YR 1983 TOTAL 38184 MEAN 105 MAX 1810 MIN 12 CFSM .62 IN 8.40

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE¼NE¼ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 miles upstream from mouth.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1929 to current year. Monthly discharges only for some periods, published in WSP 1305. Twice-daily chain gage readings at former site from July 1925 to September 1926 are available in the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 722.16 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good. Flow regulated by Geist Reservoir.

AVERAGE DISCHARGE.--54 years, 281 ft³/s, 12.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s May 28, 1956, gage height, 13.53 ft; minimum daily, 7.8 ft³/s Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft Mar. 26, 1913, from floodmarks, discharge, 22,000 ft³/s by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,010 ft³/s May 3, gage height, 8.33 ft; minimum daily, 41 ft³/s Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	54	70	419	166	101	173	1060	150	151	67	63
2	49	74	62	340	508	100	354	2570	140	179	60	63
3	49	69	102	278	684	97	633	2900	144	125	60	61
4	49	62	187	240	558	96	597	2040	158	108	63	59
5	50	61	159	223	376	97	485	1160	137	149	60	58
6	54	59	139	207	303	142	457	806	141	135	56	67
7	63	56	104	192	267	161	682	656	131	121	54	82
8	56	55	101	192	225	140	787	654	123	118	54	71
9	57	55	103	175	202	121	809	529	114	109	62	70
10	60	55	101	169	191	114	836	431	105	103	62	69
11	54	56	125	167	184	108	732	358	98	95	119	62
12	53	85	106	161	172	98	642	310	92	91	73	63
13	53	68	86	148	160	95	578	286	87	88	41	60
14	53	57	84	138	155	95	908	301	84	86	56	62
15	53	55	102	137	153	98	989	304	83	79	57	55
16	55	53	165	132	152	108	772	263	84	78	63	56
17	58	52	211	130	150	101	631	217	86	77	76	54
18	58	49	193	115	145	113	518	204	78	77	72	55
19	59	50	189	100	142	116	415	188	119	73	71	54
20	61	58	177	105	138	156	346	198	143	73	68	54
21	55	67	166	111	136	379	295	192	131	72	65	59
22	55	63	151	154	135	427	274	415	108	72	66	56
23	54	80	151	174	140	342	265	409	88	72	72	55
24	54	78	346	172	127	271	250	296	84	72	73	55
25	53	64	957	167	127	213	194	243	74	71	71	55
26	55	71	1110	158	104	191	188	214	67	71	71	54
27	57	70	1040	149	99	187	179	185	67	71	73	54
28	57	129	1350	137	101	209	233	181	77	71	96	53
29	57	107	1100	133	---	195	236	171	149	71	68	51
30	56	79	750	148	---	174	388	151	153	70	63	47
31	54	---	561	147	---	163	---	157	---	70	64	---
TOTAL	1700	1991	10248	5418	6000	5008	14846	18049	3295	2898	2076	1777
MEAN	54.8	66.4	331	175	214	162	495	582	110	93.5	67.0	59.2
MAX	63	129	1350	419	684	427	989	2900	158	179	119	82
MIN	49	49	62	100	99	95	173	151	67	70	41	47
CFSM	.18	.22	1.11	.59	.72	.54	1.66	1.95	.37	.31	.23	.20
IN.	.21	.25	1.28	.68	.75	.63	1.85	2.25	.41	.36	.26	.22

CAL YR 1982 TOTAL 129368 MEAN 354 MAX 2740 MIN 48 CFSM 1.19 IN 16.15
WTR YR 1983 TOTAL 73306 MEAN 201 MAX 2900 MIN 41 CFSM .67 IN 9.15

03353000 WHITE RIVER AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'05", long 86°10'30", in NW¼NW¼ sec.14, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of Morris Street bridge in Indianapolis, 2.6 miles downstream from Fall Creek, 3.4 miles upstream from Eagle Creek, and at mile 230.3.

DRAINAGE AREA.--1,635 mi².

PERIOD OF RECORD.--March 1904 to July 1906 and April 1930 to current year. Gage-height record published in reports of National Weather Service for site 1.1 miles upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.3 miles upstream since Oct. 16, 1913. Prior to October 1948, published as West Fork White River at Indianapolis.

REVISED RECORDS.--WSP 1335: 1932-33, 1937, 1939-41. WSP 1505: 1938. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 662.26 ft National Geodetic Vertical Datum of 1929. March 1904 to July 1906, nonrecording gage at railroad bridge 0.8 mile upstream at datum approximately 2.9 ft higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.5 miles downstream at datum 660.00 ft lower. July 21, 1931 to Mar. 2, 1932, nonrecording gage and March 3, 1932, to September 30, 1960, water-stage recorder at present site at datum 660.00 ft lower.

REMARKS.--Records good. Natural flow affected by regulation of Morse Reservoir and Geist Reservoir, and by diversion of municipal water supply by the Indianapolis Water Company.

AVERAGE DISCHARGE.--54 years (water years 1905, 1931 to current year), 1,391 ft³/s, 11.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s May 18, 1943; maximum gage height, 21.57 ft Jan. 16, 1937; minimum daily discharge, 8.0 ft³/s Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft, from floodmarks determined by Indianapolis Water Company, discharge, 70,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 4	0100	*11600	*11.60

Minimum daily discharge, 98 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	115	575	2350	684	490	939	2930	696	972	221	117
2	113	228	467	1820	1430	511	1760	7710	636	1010	182	117
3	108	192	892	1450	2640	503	3110	10800	685	886	152	112
4	108	136	1480	1210	2980	487	3590	10200	775	875	155	115
5	104	160	1830	1040	2140	501	2810	6390	667	743	186	118
6	109	153	1850	964	1590	876	2430	4200	757	613	157	155
7	171	138	1570	851	1350	796	2730	3230	796	545	144	266
8	130	132	1090	796	1150	693	3180	2830	799	393	139	140
9	137	123	800	750	1020	614	3790	2240	697	318	119	126
10	154	121	638	691	932	551	3620	1980	609	286	135	125
11	160	136	606	657	884	519	3400	1640	555	271	536	122
12	150	425	555	650	827	506	2860	1550	518	231	310	116
13	140	267	450	590	780	472	2690	1380	469	220	188	108
14	135	206	393	571	735	445	4490	1410	426	221	153	106
15	130	183	454	534	720	438	5420	1290	405	209	130	105
16	128	150	643	522	728	428	5080	1150	395	199	119	108
17	124	141	853	467	735	432	3600	985	338	204	190	106
18	120	134	1090	446	780	546	2740	876	272	212	208	106
19	117	130	1010	388	765	590	2270	852	726	577	168	104
20	132	185	834	336	778	770	1890	865	1230	481	153	118
21	113	261	707	396	720	1740	1620	889	1300	248	143	132
22	103	231	633	706	682	1970	1450	1860	877	213	132	106
23	101	406	628	713	677	1830	1280	2190	631	206	129	103
24	103	425	1570	684	664	1510	1230	2080	477	224	135	103
25	103	374	4670	677	636	1250	1110	1620	393	244	146	104
26	115	415	6730	677	601	1030	1010	1310	335	217	129	107
27	119	383	6310	643	539	1090	927	1110	302	193	144	102
28	115	819	7350	610	504	1150	1120	1020	272	188	323	98
29	107	643	6880	565	---	1030	1120	924	649	172	188	98
30	111	630	5130	623	---	948	1560	797	1160	167	137	103
31	119	---	3270	597	---	885	---	749	---	191	123	---
TOTAL	3803	8042	62458	23974	28671	25601	74826	79057	18847	11729	5474	3546
MEAN	123	268	2015	773	1024	826	2494	2550	628	378	177	118
MAX	171	819	7350	2350	2980	1970	5420	10800	1300	1010	536	266
MIN	101	115	393	336	504	428	927	749	272	167	119	98
CFSM	.08	.16	1.23	.47	.63	.51	1.53	1.56	.38	.23	.11	.07
IN.	.09	.18	1.42	.55	.65	.58	1.70	1.80	.43	.27	.12	.08

CAL YR 1982 TOTAL 692055 MEAN 1896 MAX 14500 MIN 101 CFSM 1.16 IN 15.75
WTR YR 1983 TOTAL 346028 MEAN 948 MAX 10800 MIN 98 CFSM .58 IN 7.87

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile downstream from small left-bank tributary, and at mile 7.9.

DRAINAGE AREA.--7.58 mi².

PERIOD OF RECORD.--December 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good.

AVERAGE DISCHARGE.--23 years (water years 1961 to current year), 7.61 ft³/s, 13.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s June 25, 1978, gage height, 13.86 ft; no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
July 14	1415	*343	*5.38

Minimum daily discharge, 0.20 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.81	3.8	4.4	17	1.3	11	67	1.4	2.2	.71	.48
2	.63	24	3.7	3.7	32	1.7	49	83	1.2	.99	.56	.47
3	.66	3.5	59	3.1	10	1.6	21	48	13	.77	.61	.49
4	.78	.80	29	2.7	6.1	1.7	8.2	11	7.9	40	1.3	.41
5	.82	.63	21	2.5	4.0	2.0	7.4	6.8	1.7	4.5	.61	.40
6	.82	.55	7.0	2.4	4.3	26	14	4.8	6.0	1.1	.82	4.8
7	6.5	.54	3.7	2.4	3.7	9.2	38	15	1.6	.73	.56	3.1
8	1.2	.54	2.6	2.1	3.3	3.3	9.7	9.3	1.2	.66	.79	.56
9	2.6	.53	2.1	2.1	3.2	2.3	57	4.0	1.0	.58	.58	.51
10	2.7	.54	2.9	2.5	3.1	1.9	18	3.1	.98	.53	.55	.47
11	.52	1.7	3.1	2.2	2.6	1.7	11	2.5	.94	.54	33	.44
12	.45	37	1.6	1.9	2.2	1.5	6.6	3.7	.84	.53	1.7	.36
13	.43	2.3	1.4	1.8	2.1	1.3	29	3.8	.84	.54	.77	.39
14	.47	.75	1.3	1.9	2.1	1.3	49	18	.85	22	.62	.36
15	.48	.60	18	1.9	2.1	1.0	11	7.7	.96	1.1	.58	.38
16	.49	.55	12	1.7	2.0	1.0	8.2	3.8	.81	.72	.56	.60
17	.50	.62	4.1	1.7	1.8	1.0	7.8	2.5	.78	.72	7.7	.38
18	.55	.52	2.8	1.5	1.8	9.5	4.7	2.2	6.5	.69	1.2	.33
19	.56	.65	8.4	1.3	1.7	5.0	3.6	3.0	11	14	1.5	.32
20	4.7	7.2	3.2	1.3	1.6	28	3.1	2.0	1.5	2.4	1.3	6.2
21	.56	15	2.2	2.0	1.5	27	2.8	1.6	.86	1.4	1.1	2.4
22	.46	2.2	2.2	4.8	1.5	6.9	2.3	59	.81	2.1	.88	.41
23	.43	22	6.3	8.8	1.6	4.0	2.1	20	.81	2.4	1.6	.37
24	.43	5.4	54	4.6	1.5	3.3	1.9	5.3	.76	6.6	.62	.33
25	.45	1.7	105	3.0	1.5	2.5	1.8	3.8	.70	.82	.71	.32
26	.46	14	16	2.2	1.3	2.3	1.7	2.6	.75	.89	.50	.30
27	.43	4.0	69	1.8	1.3	5.8	1.5	2.0	1.3	.89	.48	.33
28	.45	44	31	1.4	1.3	4.3	3.2	6.0	9.9	.79	10	.26
29	.51	8.2	11	2.0	---	2.5	1.8	2.4	15	.72	.83	.23
30	.48	3.3	6.9	7.0	---	2.1	41	2.2	14	.52	.61	.20
31	.69	---	5.5	2.3	---	2.1	---	2.7	---	2.2	.59	---
TOTAL	31.86	204.13	499.8	85.0	118.2	165.1	427.4	408.8	105.89	114.63	73.94	26.60
MEAN	1.03	6.80	16.1	2.74	4.22	5.33	14.2	13.2	3.53	3.70	2.39	.89
MAX	6.5	44	105	8.8	32	28	57	83	15	40	33	6.2
MIN	.43	.52	1.3	1.3	1.3	1.0	1.5	1.6	.70	.52	.48	.20
CFSM	.14	.90	2.12	.36	.56	.70	1.87	1.74	.47	.49	.32	.12
IN.	.16	1.00	2.45	.42	.58	.81	2.10	2.01	.52	.56	.36	.13

CAL YR 1982 TOTAL 3456.06 MEAN 9.47 MAX 150 MIN .43 CFSM 1.25 IN 16.96
WTR YR 1983 TOTAL 2261.35 MEAN 6.20 MAX 105 MIN .20 CFSM .82 IN 11.10

03353180 BEAN CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°43'45", long 86°07'14", in NW¼SW¼ sec.20, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 80 ft upstream from Keystone Avenue bridge and west edge of Sarah Shank Golf Course in Indianapolis, and at mile 1.8.

DRAINAGE AREA.--4.40 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 735.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record and those below 1 ft^3/s, which are poor.

AVERAGE DISCHARGE.--13 years, 5.14 ft^3/s, 15.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 770 ft^3/s June 25, 1978, gage height, 7.77 ft; minimum daily, 0.43 ft^3/s Sept. 25, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	0230	*152	*3.91
July 19	1615	133	3.74

Minimum daily discharge, 0.43 ft^3/s Sept. 25.

NOTE.--No gage-height record Oct. 17 to Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.1	2.9	3.7	7.6	2.0	5.5	28	2.4	1.5	.70	.79
2	.92	11	2.6	3.4	13	2.1	19	44	2.3	1.4	.91	.83
3	.92	4.0	24	3.2	5.0	2.0	8.6	25	4.5	1.4	.73	.62
4	1.0	2.0	14	2.9	3.2	2.0	5.2	7.9	3.0	13	.87	.45
5	1.2	1.5	9.8	2.9	2.8	2.4	5.0	5.7	2.2	2.0	.89	.47
6	1.5	1.3	4.7	2.8	2.8	11	6.4	4.7	3.4	1.3	.84	5.6
7	4.1	1.2	3.4	2.8	2.6	4.8	16	5.7	2.3	1.1	.56	1.8
8	1.3	1.2	2.9	2.5	2.5	3.0	6.2	4.5	2.2	1.1	.57	.69
9	2.5	1.1	2.6	2.5	2.5	2.8	28	3.4	2.2	1.1	.74	.69
10	1.7	1.2	2.9	2.6	2.5	2.8	9.3	3.2	2.1	1.1	.71	.63
11	1.1	1.2	2.9	2.6	2.4	2.6	6.4	3.1	2.1	1.1	9.9	.58
12	1.3	13	2.3	2.4	2.3	2.5	5.2	4.5	2.0	1.1	.96	.72
13	1.3	4.0	2.3	2.4	2.3	2.3	14	3.2	2.0	1.0	.71	.74
14	1.3	2.1	2.3	2.4	2.3	2.3	24	13	2.1	1.1	.60	.76
15	1.2	1.8	7.2	2.3	2.2	2.3	6.8	5.7	2.1	.83	.65	.85
16	1.2	1.5	5.5	2.1	2.3	2.3	5.2	3.8	2.1	.83	.73	.91
17	1.2	1.6	3.2	2.0	2.2	2.4	5.0	3.4	2.1	.80	2.1	.56
18	1.1	1.5	2.8	1.9	2.1	5.3	4.1	3.1	2.0	.90	.90	.47
19	1.1	1.4	4.8	1.8	2.1	3.4	3.7	3.4	2.5	9.6	.84	.53
20	2.5	3.0	3.0	1.7	2.1	14	3.2	2.8	2.1	1.4	.74	2.2
21	1.5	6.0	2.8	2.5	2.0	13	3.2	2.6	1.9	1.1	.64	1.4
22	1.3	3.0	2.6	13	2.1	4.7	3.1	18	1.8	1.1	.74	.73
23	1.2	10	3.0	4.7	2.0	3.9	3.0	4.8	1.8	.89	1.9	.67
24	1.1	5.0	22	3.4	2.1	3.4	2.8	3.4	1.9	1.2	.94	.58
25	1.1	2.0	45	2.9	2.1	3.1	2.8	3.2	1.8	.83	.76	.43
26	1.2	8.0	9.8	2.5	2.0	3.0	2.8	3.0	1.5	.86	.78	.56
27	1.1	2.7	33	2.5	2.0	3.5	2.8	2.6	1.9	.91	.66	.68
28	1.1	15	18	2.4	2.0	3.5	3.0	4.5	1.9	.86	3.7	.66
29	1.1	3.7	7.0	2.5	---	2.9	2.8	2.6	2.5	.93	.73	.60
30	1.1	2.6	5.0	3.9	---	2.9	12	2.5	6.0	.73	.80	.78
31	1.2	---	4.2	2.5	---	2.8	---	2.8	---	1.2	.82	---
TOTAL	42.36	114.7	258.5	93.7	83.1	121.0	225.1	228.1	70.7	54.27	38.12	27.98
MEAN	1.37	3.82	8.34	3.02	2.97	3.90	7.50	7.36	2.36	1.75	1.23	.93
MAX	4.1	15	45	13	13	14	28	44	6.0	13	9.9	5.6
MIN	.92	1.1	2.3	1.7	2.0	2.0	2.8	2.5	1.5	.73	.56	.43
CFSM	.31	.87	1.90	.69	.68	.89	1.71	1.67	.54	.40	.28	.21
IN.	.36	.97	2.19	.79	.70	1.02	1.90	1.93	.60	.46	.32	.24

CAL YR 1982 TOTAL 1969.01 MEAN 5.39 MAX 56 MIN .92 CFSM 1.23 IN 16.64
WTR YR 1983 TOTAL 1357.63 MEAN 3.72 MAX 45 MIN .43 CFSM .85 IN 11.48

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft upstream from Long Branch, and at mile 24.7.

DRAINAGE AREA.--103 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 816.85 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair. Low flow is affected by the Zionsville well field located on the right bank below the gage.

AVERAGE DISCHARGE.--26 years, 99.4 ft^3/s, 13.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft^3/s Apr. 20, 1964, gage height, 14.64 ft; no flow at times during 1959, 1963-68, 1970, 1971, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft, from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	1700	*3090	*9.27
May 2	0500	2150	7.91

Minimum daily discharge, no flow Sept. 16-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	1.6	19	165	40	35	76	251	37	98	8.7	.90
2	.85	2.0	16	134	392	33	476	1330	35	46	4.4	.80
3	.82	2.8	150	105	387	33	519	609	36	28	3.2	.70
4	.80	2.8	300	85	184	32	310	375	61	93	7.1	.60
5	.78	2.7	580	76	176	31	216	227	40	90	3.2	.50
6	1.2	2.3	407	68	100	45	227	154	122	35	2.5	.45
7	2.9	2.2	188	68	85	46	247	122	105	22	2.3	.40
8	2.2	1.7	116	59	78	43	196	100	64	16	2.0	.35
9	2.4	2.0	81	57	66	36	212	76	50	14	1.6	.30
10	2.0	2.3	74	61	66	33	212	68	39	12	1.6	.25
11	1.5	2.3	72	61	66	31	165	63	35	10	11	.20
12	1.3	3.7	59	51	61	30	125	59	32	8.3	3.2	.15
13	1.1	4.2	51	46	59	28	161	57	28	7.4	2.1	.10
14	1.0	3.5	45	46	59	28	1040	59	25	6.1	2.0	.05
15	1.2	3.2	51	46	61	28	492	55	23	5.5	1.7	.01
16	1.0	3.0	140	43	63	26	285	51	23	5.1	1.4	.00
17	.92	2.8	107	38	63	25	231	43	21	4.9	3.9	.00
18	.85	2.8	90	32	59	36	165	39	19	5.4	7.3	.00
19	.80	2.8	78	29	61	46	125	55	363	47	4.7	.00
20	.98	3.7	63	26	57	76	100	66	151	21	3.9	.00
21	1.1	4.2	51	30	53	414	85	50	74	8.3	3.0	.00
22	1.1	4.7	46	55	51	235	74	180	48	7.0	2.3	.00
23	1.1	12	55	62	51	144	70	184	33	10	2.5	.00
24	1.2	17	400	55	48	110	64	105	24	9.1	2.2	.00
25	1.2	12	1860	45	43	87	55	83	20	6.4	1.5	.00
26	1.4	12	911	40	37	74	51	68	17	4.6	.75	.00
27	3.5	15	769	36	35	90	48	55	14	3.9	1.5	.00
28	1.5	39	1060	30	35	113	53	51	18	3.6	2.5	.00
29	1.3	37	488	32	---	90	48	50	17	4.1	1.9	.00
30	1.3	24	306	40	---	81	87	43	239	4.9	1.4	.00
31	1.7	---	220	39	---	76	---	42	---	38	1.1	---
TOTAL	41.88	231.3	8853	1760	2536	2235	6215	4770	1813	674.6	98.45	5.76
MEAN	1.35	7.71	286	56.8	90.6	72.1	207	154	60.4	21.8	3.18	.19
MAX	3.5	39	1860	165	392	414	1040	1330	363	98	11	.90
MIN	.78	1.6	16	26	35	25	48	39	14	3.6	.75	.00
CFSM	.01	.08	2.78	.55	.88	.70	2.01	1.50	.59	.21	.03	.002
IN.	.02	.08	3.20	.64	.92	.81	2.24	1.72	.65	.24	.04	.00

CAL YR 1982 TOTAL 60272.20 MEAN 165 MAX 1860 MIN .78 CFSM 1.60 IN 21.77
WTR YR 1983 TOTAL 29233.99 MEAN 80.1 MAX 1860 MIN .00 CFSM .78 IN 10.56

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW¼NW¼ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft upstream from Interstate Highway 74, 0.5 mile downstream from School Branch, 1.0 mile northeast of Clermont, and 2 miles west of Indianapolis.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch diameter conduit. Spillway elevation, 783 ft is an ogee section with 6 taintor gates, each 40 ft wide and 25 ft high. Permanent pool capacity is 24,000 acre-ft, elevation, 790.00 ft. Reservoir is used for flood control, low-flow maintenance, water supply, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,350 acre-ft June 26, 1978, elevation, 792.39 ft; minimum, 13,750 acre-ft Nov. 28, 1971, elevation, 781.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 24,940 acre-ft Dec. 25, elevation, 790.67 ft; minimum, 14,400 acre-ft Nov. 19, elevation, 781.90 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	787.69	21,000	
Oct. 31	782.13	14,630	-6,370
Nov. 30	782.59	15,090	+460
Dec. 31	789.98	23,970	+8880
CAL YR 1982			+10
Jan. 31	790.09	24,130	+160
Feb. 28	790.09	24,130	0
Mar. 31	790.10	24,140	+10
Apr. 30	790.01	24,010	-130
May 31	790.01	24,010	0
June 30	790.02	24,030	+20
July 31	789.00	22,700	-1330
Aug. 31	788.24	21,710	-990
Sept. 30	786.76	19,810	-1,190
WTR YR 1983			-1,190

03353500 EAGLE CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°15'01", in NW¼NW¼ sec.6, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on Lynhurst Drive, approximately 600 ft south of intersection of West 10th Street and Lynhurst Drive, 0.5 mile downstream from West 10th Street bridge, 1.0 mile upstream from Vermont Street bridge, 3.0 miles upstream from Little Eagle Creek, and 7.1 miles upstream from mouth.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft National Geodetic Vertical Datum of 1929. Aug. 8, 1957 to June 30, 1958, temporary site during reconstruction of bridge on Lynhurst Drive, a nonrecording gage on downstream side of 10th Street bridge. Mar. 10, 1966 to Aug. 16, 1967, during channelization of Eagle Creek, a nonrecording gage on downstream side of Lynhurst Drive bridge. Prior to Oct. 1, 1967, at datum 7.21 ft higher.

REMARKS.--Records fair. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles upstream (See sta 03353450).

AVERAGE DISCHARGE.--44 years (water years 1940 to current year), 155 ft^3/s, 12.0 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft^3/s June 28, 1957, gage height, 23.59 ft present datum from rating curve extended above 9,000 ft^3/s on basis of a combined current-meter meas-urement and slope-area measurement; no flow for several days in August 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft present datum, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,170 ft^3/s Dec. 26, gage height, 6.37 ft; minimum daily, 2.4 ft^3/s Oct. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	3.4	5.6	172	182	48	178	330	67	169	12	13
2	38	6.9	4.1	220	498	139	717	2200	66	47	12	12
3	11	4.0	40	188	687	49	761	1000	72	45	11	13
4	11	3.0	39	150	274	49	482	550	70	211	12	12
5	11	2.8	54	133	270	48	355	370	65	196	11	13
6	11	2.6	23	126	200	61	338	220	200	48	12	20
7	11	2.8	15	123	160	155	397	250	193	46	12	12
8	11	2.8	12	31	51	46	294	180	65	47	12	11
9	11	2.8	11	157	132	43	386	150	66	44	11	10
10	20	2.8	10	109	149	46	386	70	65	43	11	11
11	450	2.8	9.8	41	129	49	224	70	64	42	27	11
12	1050	15	9.8	101	46	51	259	189	63	43	13	10
13	760	4.0	9.8	36	114	50	271	185	62	38	16	9.9
14	350	3.4	8.8	123	44	47	1740	171	60	26	14	9.9
15	215	3.0	13	35	124	43	925	80	55	24	13	11
16	200	2.8	15	91	141	45	577	177	45	22	13	10
17	200	2.8	11	30	51	46	294	73	46	22	24	10
18	100	2.8	11	25	137	82	345	68	57	21	14	9.7
19	25	3.0	11	25	55	132	130	72	207	26	13	9.5
20	10	4.8	11	25	113	169	180	68	304	22	13	8.6
21	6.0	6.7	10	97	70	636	150	153	57	19	12	9.5
22	4.5	3.1	10	87	49	359	120	393	47	19	12	9.1
23	3.6	11	13	84	132	175	110	338	53	19	12	8.9
24	3.4	4.8	433	131	49	200	60	241	43	21	11	8.4
25	3.0	4.0	2190	109	49	200	140	180	43	19	11	9.5
26	3.4	4.0	2220	44	49	55	60	153	45	19	11	9.9
27	2.4	3.8	1150	117	48	260	55	75	47	17	12	12
28	2.4	20	2000	52	48	220	160	81	54	16	25	12
29	2.4	8.1	814	35	---	184	53	151	54	15	15	12
30	3.0	6.0	667	105	---	102	190	71	302	12	14	10
31	4.0	---	364	41	---	107	---	71	---	13	14	---
TOTAL	3544.1	149.8	10194.9	2843	4051	3896	10337	8380	2637	1371	425	327.9
MEAN	114	4.99	329	91.7	145	126	345	270	87.9	44.2	13.7	10.9
MAX	1050	20	2220	220	687	636	1740	2200	304	211	27	20
MIN	2.4	2.6	4.1	25	44	43	53	68	43	12	11	8.4
CFSM	.66	.03	1.89	.53	.83	.72	1.98	1.55	.51	.25	.08	.06
IN.	.76	.03	2.18	.61	.87	.83	2.21	1.79	.56	.29	.09	.07

CAL YR 1982 TOTAL 93004.8 MEAN 255 MAX 2400 MIN 2.4 CFSM 1.47 IN 19.88
WTR YR 1983 TOTAL 48156.7 MEAN 132 MAX 2220 MIN 2.4 CFSM .76 IN 10.30

03353600 LITTLE EAGLE CREEK AT SPEEDWAY, IN

LOCATION.--Lat 39°47'15", long 86°13'41", in NE¼SW¼ sec.32, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at upstream side of 16th Street bridge in Speedway, 0.6 mile upstream from Dry Run, and 2.3 miles upstream from mouth.

DRAINAGE AREA.--23.9 mi² including 5.57 mi² from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi² of Dry Run basin has been diverted into Little Eagle Creek above gage.

PERIOD OF RECORD.--October 1959 to current year. Figures of runoff for June 1964 to September 1966 have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 707.82 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 13, 1975, at datum 3.00 ft higher.

REMARKS.--Records good except for those for October, which are fair.

AVERAGE DISCHARGE.--19 years (water years 1965 to current year) 20.6 ft³/s, 11.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft³/s July 28, 1979, gage height, 12.13 ft; no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1100	611	5.29	June 19	0100	*657	*5.67
May 2	0145	550	5.07				

Minimum daily discharge, 0.26 ft³/s Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.2	4.6	22	24	5.8	28	153	7.3	8.7	8.3	.76
2	1.0	12	7.0	17	112	5.7	104	288	6.3	5.0	1.9	.66
3	.94	8.2	100	14	56	5.7	91	136	19	3.4	1.5	.59
4	1.0	3.4	113	12	36	5.6	59	67	30	40	6.8	.56
5	1.0	2.1	127	11	26	5.1	43	49	10	13	4.1	.48
6	1.1	1.6	60	10	20	36	44	41	31	4.6	4.9	9.3
7	6.0	1.3	34	11	15	15	56	45	12	3.5	1.2	12
8	2.9	1.1	22	8.8	13	15	33	50	6.0	2.8	.91	2.1
9	4.5	.98	18	8.2	11	11	62	32	4.9	2.5	.76	1.1
10	2.0	1.0	15	8.9	13	9.4	48	29	4.0	2.4	.73	.71
11	.92	1.4	16	8.6	17	8.7	33	24	3.4	2.3	75	.75
12	.36	40	9.0	7.6	15	8.0	24	32	3.2	2.0	8.1	.67
13	.28	8.0	5.2	6.4	13	7.8	38	32	2.7	2.1	2.6	.58
14	.26	3.0	4.8	6.0	12	7.9	227	37	2.3	1.7	1.7	.58
15	.26	2.0	14	6.1	9.9	7.6	74	30	2.0	1.4	1.5	.67
16	.30	1.6	33	5.4	8.9	7.8	46	24	2.1	1.4	1.1	.62
17	.44	1.4	14	5.0	8.2	7.7	47	17	2.0	5.1	16	.63
18	.82	1.3	11	4.7	8.0	23	31	14	17	2.5	8.4	.56
19	.90	1.3	11	4.4	7.7	22	24	29	126	87	2.5	.50
20	6.0	6.7	9.5	4.0	7.0	42	17	21	17	40	1.8	.56
21	1.1	13	7.8	4.4	7.1	101	16	16	6.8	5.7	1.8	2.4
22	.84	5.7	6.3	27	7.4	41	13	132	4.6	3.6	1.4	1.2
23	.73	34	20	19	7.3	28	17	57	3.6	2.4	1.2	1.0
24	.73	19	128	17	7.0	23	14	33	3.2	6.7	.97	.72
25	.73	3.4	360	12	6.8	17	11	25	2.8	3.0	1.1	.64
26	.73	14	104	9.1	6.0	14	11	19	2.5	1.6	.86	.56
27	.73	12	150	8.4	5.3	34	10	15	2.1	1.2	1.2	.54
28	.89	70	165	7.4	5.5	42	16	29	9.9	1.2	19	.62
29	.78	27	56	8.5	---	28	20	20	16	.95	2.8	.65
30	.68	8.6	35	16	---	23	94	13	80	4.8	1.1	.58
31	1.6	---	28	14	---	21	---	11	---	8.2	.86	---
TOTAL	41.44	306.28	1688.2	323.9	485.1	628.8	1351	1520	439.7	270.75	182.09	43.29
MEAN	1.34	10.2	54.5	10.4	17.3	20.3	45.0	49.0	14.7	8.73	5.87	1.44
MAX	6.0	70	360	27	112	101	227	288	126	87	75	12
MIN	.26	.98	4.6	4.0	5.3	5.1	10	11	2.0	.95	.73	.48
CFSM	.06	.43	2.28	.44	.72	.85	1.88	2.05	.62	.37	.25	.06
IN.	.06	.48	2.63	.50	.76	.98	2.10	2.37	.68	.42	.28	.07

CAL YR 1982 TOTAL 10375.48 MEAN 28.4 MAX 987 MIN .26 CFSM 1.19 IN 16.15
WTR YR 1983 TOTAL 7280.55 MEAN 19.9 MAX 360 MIN .26 CFSM .83 IN 11.33

03353620 LICK CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'21", long 86°06'13", in NE¼NE¼ sec.32, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank at upstream side of Sherman Drive bridge in Indianapolis, and at mile 6.2.

DRAINAGE AREA.--15.6 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft National Geodetic Vertical Datum of 1929 (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--13 years, 18.9 ft³/s, 16.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s June 25, 1978, gage height, 9.61 ft; minimum daily, 0.05 ft³/s Sept. 19, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1045	*415	*3.75	July 19	1645	386	3.64
May 2	0330	415	3.75				

Minimum daily discharge, 0.05 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	1.1	10	15	23	5.3	17	94	4.3	3.5	1.1	.31
2	.55	14	14	13	72	5.3	93	166	3.9	1.7	.63	.13
3	.57	8.1	78	11	32	5.0	56	111	13	1.1	.50	.11
4	.68	1.9	67	9.9	17	4.9	30	39	14	44	.73	.08
5	.67	3.0	50	9.2	13	5.7	23	24	7.9	9.9	.62	.06
6	.63	1.5	27	8.9	12	28	32	16	11	2.1	.67	7.8
7	2.7	.97	18	8.4	10	16	84	17	5.1	1.3	1.3	2.7
8	1.8	.81	14	7.2	9.4	9.5	34	17	3.8	1.1	.74	.35
9	2.8	.80	9.6	7.2	9.0	7.7	127	9.6	3.3	.96	.60	.17
10	1.6	.83	9.2	8.2	9.2	7.2	52	7.7	3.2	.85	.51	.44
11	.94	1.5	9.6	7.4	8.7	6.6	31	6.4	2.6	.76	16	.14
12	.77	32	7.1	6.4	7.5	5.9	23	7.6	2.3	.86	3.5	.08
13	.62	5.3	5.5	6.0	7.0	5.5	43	8.4	2.2	.74	1.5	.09
14	1.6	2.5	5.8	5.7	7.4	5.7	128	33	2.2	4.5	.54	.08
15	1.9	1.4	17	5.5	7.7	5.4	37	27	2.0	3.6	.43	.08
16	1.0	1.2	31	5.2	8.0	7.0	23	16	2.0	2.6	.40	.28
17	.76	1.3	16	5.0	7.7	5.0	20	9.2	1.9	1.2	3.3	.13
18	.69	1.2	13	4.8	7.1	14	15	7.3	1.6	.67	1.4	.08
19	.63	1.1	17	4.7	7.1	13	12	8.5	7.3	22	.65	.05
20	1.4	5.2	12	4.4	6.0	37	9.8	6.2	3.3	5.0	.32	.72
21	1.5	15	9.1	5.0	5.9	66	8.4	5.1	2.0	1.3	.17	.65
22	.77	4.8	8.0	34	6.1	24	7.4	96	1.7	.87	.11	.34
23	.61	26	9.3	23	6.5	16	6.8	31	1.7	.71	.37	.18
24	.50	9.3	69	18	6.3	13	6.0	17	1.5	1.6	.37	.12
25	.48	3.4	224	15	6.5	11	5.2	11	1.5	1.3	.23	.10
26	.56	18	63	13	5.6	12	4.8	7.9	1.3	.90	.21	.10
27	.63	12	167	10	5.3	19	4.4	6.1	2.3	1.3	.29	.10
28	.65	55	92	9.1	5.7	17	6.6	12	2.3	1.7	9.9	.10
29	.82	17	32	8.8	---	12	6.8	7.3	5.6	.62	.62	.15
30	.89	9.0	24	17	---	10	26	5.1	12	.69	.29	.15
31	1.5	---	19	12	---	9.8	---	6.4	---	1.1	.70	---
TOTAL	31.80	255.21	1147.2	318.0	328.7	409.5	972.2	835.8	128.8	120.53	48.70	15.87
MEAN	1.03	8.51	37.0	10.3	11.7	13.2	32.4	27.0	4.29	3.89	1.57	.53
MAX	2.8	55	224	34	72	66	128	166	14	44	16	7.8
MIN	.48	.80	5.5	4.4	5.3	4.9	4.4	5.1	1.3	.62	.11	.05
CFSM	.07	.55	2.37	.66	.75	.85	2.08	1.73	.28	.25	.10	.03
IN.	.08	.61	2.74	.76	.78	.98	2.32	1.99	.31	.29	.12	.04

CAL YR 1982 TOTAL 7793.27 MEAN 21.4 MAX 300 MIN .46 CFSM 1.37 IN 18.58
WTR YR 1983 TOTAL 4612.31 MEAN 12.6 MAX 224 MIN .05 CFSM .81 IN 11.00

03353700 WEST FORK WHITE LICK CREEK AT DANVILLE, IN

LOCATION.--Lat 39°45'36", long 86°30'47", in NW¼NE¼ sec.10, T.15 N., R.1 W., Hendricks County, Hydrologic Unit 05120201, on downstream side of bridge on U.S. Highway 36, 0.1 mile east of city limits of Danville, 0.5 mile upstream from small left-bank tributary and 7 miles west of Avon.

DRAINAGE AREA.--28.8 mi^2.

PERIOD OF RECORD.--May 1958 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 828.83 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1968, nonrecording gage and crest-stage gage on upstream side of bridge at same datum. Oct. 23, 1968, to Aug. 6, 1970, water-stage recorder on upstream side of bridge at same datum.

REMARKS.--Records good. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--25 years, 29.2 ft^3/s, 13.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft^3/s July 14, 1962, gage height, 11.32 ft; maximum gage height, 12.13 ft July 13, 1979; no flow at times during 1961-67, 1970, 1971, 1978, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft, from floodmarks, discharge, 6,660 ft^3/s, from contracted-opening measurement .

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	1315	*891	*5.80

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.29	9.6	39	19	9.0	23	95	8.5	7.2	.18	.03
2	.03	.85	11	32	163	8.4	127	334	7.8	4.2	.05	.02
3	.03	.85	159	26	115	8.0	116	175	11	2.8	.02	.00
4	.03	.43	263	21	58	8.0	69	95	11	6.4	.15	.00
5	.03	.29	232	21	37	8.4	50	55	8.9	13	.10	.00
6	.11	.21	122	20	29	15	46	36	43	5.5	.05	1.5
7	1.2	.15	72	18	20	12	50	30	26	3.2	.02	.60
8	.53	.15	49	15	15	11	44	30	16	2.5	.00	.60
9	.56	.15	35	15	17	9.4	37	21	12	2.0	.00	.08
10	.37	.12	30	16	19	9.0	34	17	9.8	1.7	.00	.02
11	.24	.15	26	15	20	8.2	30	15	8.7	1.5	.85	.00
12	.17	3.2	21	12	17	7.8	27	14	8.1	1.1	.05	.00
13	.12	1.7	21	12	16	7.7	50	16	7.5	.86	.02	.00
14	.07	.85	16	12	16	7.9	309	18	6.9	.67	.00	.00
15	.06	.60	17	11	15	7.1	128	16	6.8	.60	.00	.00
16	.05	.43	37	10	16	6.7	73	14	6.0	.47	.00	.00
17	.03	.38	30	9.0	15	6.9	58	12	5.3	.38	1.2	.00
18	.03	.38	26	8.4	14	9.7	43	11	4.9	.36	.10	.00
19	.03	.38	23	7.7	15	11	33	15	5.2	.69	.03	.00
20	.29	.72	19	7.3	13	36	28	12	4.2	1.1	.85	.18
21	.15	1.4	16	8.0	12	119	23	10	3.6	.59	.25	.22
22	.15	.78	15	15	13	57	21	30	3.0	.34	.48	.03
23	.10	4.7	21	16	13	37	20	23	2.8	.16	.05	.02
24	.07	6.4	186	13	12	29	18	15	2.5	.56	.02	.02
25	.07	3.0	589	12	10	23	16	13	2.3	.32	.00	.02
26	.07	4.0	273	11	8.8	21	14	11	2.1	.16	.00	.06
27	.05	7.7	232	10	8.8	28	14	9.4	2.0	.09	.00	.01
28	.07	34	339	11	9.1	30	15	16	3.0	.04	1.8	.03
29	.07	25	165	12	---	24	14	13	4.7	.04	.07	.00
30	.05	13	87	13	---	23	28	10	11	.07	.03	.00
31	.33	---	55	12	---	22	---	10	---	.43	.15	---
TOTAL	5.20	112.26	3196.6	460.4	735.7	620.2	1558	1191.4	254.6	59.03	6.52	3.44
MEAN	.17	3.74	103	14.9	26.3	20.0	51.9	38.4	8.49	1.90	.21	.11
MAX	1.2	34	589	39	163	119	309	334	43	13	1.8	1.5
MIN	.03	.12	9.6	7.3	8.8	6.7	14	9.4	2.0	.04	.00	.00
CFSM	.006	.13	3.58	.52	.91	.69	1.80	1.33	.30	.07	.007	.004
IN.	.01	.14	4.13	.59	.95	.80	2.01	1.54	.33	.08	.01	.00

CAL YR 1982 TOTAL 14464.07 MEAN 39.6 MAX 589 MIN .03 CFSM 1.38 IN 18.68
WTR YR 1983 TOTAL 8203.35 MEAN 22.5 MAX 589 MIN .00 CFSM .78 IN 10.60

03353800 WHITE LICK CREEK AT MOORESVILLE, IN

LOCATION.--Lat 39°36'28", long 86°22'56", in NE¼SE¼ sec.35, T.14 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on State Highway 42 at Mooresville, 0.9 mile downstream from McCracken Creek, 2.0 miles upstream from East Fork White Lick Creek, and at mile 11.4.

DRAINAGE AREA.--212 mi².

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft National Geodetic Vertical Datum of 1929. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft upstream at datum 1.39 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--26 years, 220 ft³/s, 14.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s July 13, 1979, gage height, 23.31 ft; minimum daily, 2.0 ft³/s Dec. 24, 25, 1960, Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft, from levels to high-water mark by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1500	*4320	*18.20

Minimum daily discharge 4.9 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	71	316	129	93	186	478	109	203	13	9.5
2	11	23	60	271	715	90	538	1670	99	114	11	8.5
3	9.7	34	289	247	691	87	701	1020	118	73	11	8.5
4	8.7	25	1000	201	378	85	473	645	144	86	11	8.0
5	8.9	20	1090	184	265	85	356	431	114	210	11	7.5
6	7.8	17	708	173	237	130	342	328	136	124	10	7.5
7	15	15	407	166	210	129	398	273	177	77	9.5	19
8	23	14	276	155	156	122	353	284	130	58	8.5	16
9	23	13	210	141	168	107	455	217	105	49	7.5	11
10	23	12	173	148	172	99	383	190	92	42	7.1	8.5
11	18	12	159	141	175	94	326	171	82	37	12	7.5
12	16	33	131	129	164	88	271	161	75	34	15	7.1
13	15	46	104	116	151	84	292	185	70	30	20	6.7
14	14	29	100	112	149	84	1490	242	65	28	14	6.3
15	13	21	102	110	147	82	796	266	63	27	11	5.9
16	12	18	201	95	143	78	483	224	60	28	9.5	5.9
17	11	15	196	88	143	75	396	173	58	24	12	5.9
18	11	15	164	76	136	93	326	153	55	26	22	5.5
19	9.7	15	148	71	135	122	269	159	70	24	18	4.9
20	13	17	141	76	131	166	232	166	103	24	13	5.2
21	15	22	110	82	123	692	208	143	79	22	11	5.5
22	13	26	97	144	121	404	192	328	58	19	9.5	5.5
23	13	34	106	161	124	280	179	310	50	17	10	5.9
24	12	59	719	148	132	230	167	225	44	17	18	5.9
25	12	46	3010	137	110	197	152	179	42	15	10	5.9
26	11	40	1610	125	99	176	142	155	37	13	9.0	5.9
27	11	49	1140	116	93	215	135	134	35	13	9.5	5.9
28	12	127	1780	106	92	265	138	142	37	12	24	5.9
29	11	166	804	104	---	227	136	158	58	11	30	5.9
30	9.7	102	513	129	---	192	162	127	272	11	17	5.2
31	12	---	389	127	---	183	---	119	---	12	12	---
TOTAL	406.5	1078	16008	4395	5489	5054	10677	9456	2637	1480	406.1	222.4
MEAN	13.1	35.9	516	142	196	163	356	305	87.9	47.7	13.1	7.41
MAX	23	166	3010	316	715	692	1490	1670	272	210	30	19
MIN	7.8	12	60	71	92	75	135	119	35	11	7.1	4.9
CFSM	.06	.17	2.43	.67	.93	.77	1.68	1.44	.42	.23	.06	.04
IN.	.07	.19	2.81	.77	.96	.89	1.87	1.66	.46	.26	.07	.04

CAL YR 1982 TOTAL 95918.5 MEAN 263 MAX 3010 MIN 7.8 CFSM 1.24 IN 16.83
WTR YR 1983 TOTAL 57309.0 MEAN 157 MAX 3010 MIN 4.9 CFSM .74 IN 10.06

03354000 WHITE RIVER NEAR CENTERTON, IN

LOCATION.--Lat 39°29'51", long 86°24'02", in NE¼NE¼ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mile downstream from White Lick Creek, 1 mile south of Centerton, and at mile 199.3.

DRAINAGE AREA.--2,444 mi².

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mile downstream at same datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--38 years (1930-31, 1946 to current year), 2,403 ft³/s, 13.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s Apr. 22, 1964, gage height, 17.57 ft, at site 0.4 mile downstream; minimum daily, 131 ft³/s Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft at site 0.4 mile downstream (from information by Corps of Engineers), discharge, 90,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0200	*15200	*12.05	Apr. 14	1800	10,300	9.27
Dec. 28	1200	14200	11.53	May. 4	1000	14,600	11.74

Minimum daily discharge, 260 ft³/s Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	420	1210	4540	1450	1030	1690	5760	1570	2140	474	412
2	403	463	1140	3760	3150	1070	2910	11600	1470	1710	541	380
3	395	794	1550	3190	4770	1080	5100	13800	1680	1620	457	368
4	325	536	4100	2780	4570	991	5400	14500	1960	1440	356	338
5	307	434	4210	2520	3900	972	4670	12000	1570	2200	389	337
6	299	445	3930	2330	3070	1460	4160	7260	1530	1530	409	333
7	352	432	2960	2190	2650	1670	4580	5340	1720	1260	368	739
8	468	408	2350	2050	2310	1560	4760	4900	1670	1100	347	602
9	385	417	1870	1910	2120	1320	6340	4000	1460	919	353	466
10	417	400	1560	1850	1960	1220	6120	3520	1310	814	331	427
11	366	418	1430	1770	1910	1140	5370	3080	1180	760	490	393
12	710	575	1320	1690	1790	1080	4670	2800	1100	709	1120	367
13	1230	900	1170	1590	1620	1020	4250	2860	1030	628	638	388
14	889	600	1070	1480	1580	957	8660	2760	969	597	515	388
15	573	500	1010	1460	1550	936	8680	3050	914	590	425	384
16	457	450	1480	1370	1470	916	7660	2620	877	560	383	363
17	386	415	1580	1350	1540	899	6140	2340	846	522	360	366
18	343	395	1680	1230	1460	970	4780	2070	822	531	616	345
19	339	380	1740	1150	1540	1300	3960	1930	1470	552	538	329
20	317	434	1690	1060	1460	1250	3430	1920	1850	1370	466	335
21	342	532	1490	1030	1470	3820	3030	1880	2160	804	419	378
22	298	670	1350	1460	1360	3530	2700	3390	1770	613	376	410
23	268	637	1290	1860	1370	3220	2500	3690	1430	541	397	370
24	260	1060	2170	1690	1390	2800	2350	3440	1200	495	524	338
25	271	820	9040	1630	1280	2380	2170	2910	1030	538	420	338
26	293	743	13300	1580	1210	2090	2030	2530	900	537	402	338
27	374	953	11500	1500	1110	1970	1830	2250	816	476	391	338
28	397	1240	13600	1450	1050	2260	1850	2050	795	438	770	344
29	398	1690	11500	1330	---	2110	2020	2070	1100	438	754	352
30	386	1280	9040	1380	---	1920	2250	1820	1990	414	544	355
31	400	---	6110	1490	---	1790	---	1650	---	440	443	---
TOTAL	13058	19441	119440	57670	56110	50731	126060	135790	40189	27286	15016	11621
MEAN	421	648	3853	1860	2004	1636	4202	4380	1340	880	484	387
MAX	1230	1690	13600	4540	4770	3820	8680	14500	2160	2200	1120	739
MIN	260	380	1010	1030	1050	899	1690	1650	795	414	331	329
CFSM	.17	.27	1.58	.76	.82	.67	1.72	1.79	.55	.36	.20	.16
IN.	.20	.30	1.82	.88	.85	.77	1.92	2.07	.61	.42	.23	.18

CAL YR 1982 TOTAL 1163062 MEAN 3186 MAX 19000 MIN 260 CFSM 1.30 IN 17.70
WTR YR 1983 TOTAL 672412 MEAN 1842 MAX 14500 MIN 260 CFSM .75 IN 10.23

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

INSTRUMENTATION.--Temperature recorder.

EXTREMES FOR PERIOD OF RECORD.--Water temperature: Maximum, 33°C July 3, 1970; Minimum, 0°C Feb. 13, 14, 1955, Jan. 7-10, 1970, Feb. 1-15, 1971, and Jan. 5, 6, Feb. 4, 5, 11-13, 1981.

EXTREMES FOR CURRENT YEAR.--Water Temperature: Maximum, 32°C July 22, 23; Minimum, 1°C Feb. 4, 5, 8.

REMARKS.--Temperature affected by upstream powerplants and reservoirs.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.5	16.5	9.5	4.5	4.0	9.0	10.5	16.0	17.0	27.0	27.0	26.5
2	22.0	17.0	12.0	4.0	4.0	10.0	9.5	15.5	18.0	29.0	27.0	26.0
3	21.5	16.0	13.5	4.0	3.5	11.0	8.0	15.5	17.5	28.0	27.0	26.0
4	21.5	12.0	13.0	3.5	1.5	12.5	8.0	14.5	19.0	26.5	26.5	26.0
5	22.0	9.0	13.5	4.0	1.5	14.0	9.0	15.0	21.0	25.0	27.0	26.5
6	22.0	8.5	11.5	5.0	2.0	14.5	10.5	15.5	20.5	24.0	28.0	26.0
7	22.0	10.0	9.0	5.5	2.0	14.5	11.0	16.0	20.0	24.0	28.0	25.5
8	21.5	12.0	8.5	5.0	1.5	13.0	10.5	15.5	21.5	24.5	28.0	24.5
9	21.5	12.5	7.5	4.5	3.5	10.0	10.0	15.5	22.0	25.5	28.0	24.5
10	22.0	13.0	6.0	5.5	4.0	8.0	9.5	16.0	23.0	26.0	26.5	26.0
11	19.0	14.5	6.0	6.0	4.5	7.5	9.5	16.5	23.5	27.0	27.0	26.5
12	17.5	12.5	4.5	5.0	4.0	7.5	10.0	18.0	24.5	27.5	26.5	25.5
13	17.5	9.0	3.5	4.0	4.0	8.5	11.5	18.5	25.0	28.0	25.5	24.0
14	18.0	7.5	4.0	4.5	4.0	10.5	12.0	19.0	25.5	28.0	25.0	22.0
15	16.5	7.0	6.0	4.0	5.0	11.5	10.5	18.0	25.5	28.0	25.5	21.0
16	15.5	6.5	5.5	3.0	5.5	12.0	10.0	16.5	25.0	28.5	26.0	21.5
17	14.5	8.5	4.5	2.5	5.5	11.5	10.0	17.5	25.5	28.0	25.0	21.5
18	14.5	9.5	4.5	2.5	6.0	11.5	9.0	17.5	26.0	28.5	26.0	23.0
19	15.0	12.0	5.0	2.5	7.0	10.5	8.5	17.5	25.0	29.0	28.5	24.0
20	14.0	13.0	4.5	2.5	7.5	8.5	9.0	18.5	25.0	28.5	29.5	24.0
21	13.0	14.0	4.5	3.5	8.0	5.0	10.5	19.0	27.0	29.5	29.5	20.0
22	12.0	13.0	4.5	4.0	9.0	4.5	12.0	18.5	27.0	30.0	29.0	17.5
23	11.5	12.5	7.0	3.0	10.0	4.5	12.5	19.0	27.0	30.0	28.0	17.0
24	11.5	9.0	8.5	3.0	9.5	5.5	13.0	19.5	27.5	30.0	28.0	17.0
25	11.5	6.5	11.0	3.0	8.0	6.5	13.0	19.0	27.5	29.0	28.0	17.0
26	12.0	7.0	10.0	3.5	7.5	7.5	14.0	18.0	28.5	28.0	27.5	18.5
27	12.0	6.5	8.5	4.0	7.0	8.5	16.5	18.0	28.0	27.0	27.0	19.5
28	13.5	7.0	9.5	4.0	8.0	7.0	18.0	18.0	27.0	27.0	27.0	20.5
29	14.0	7.0	7.0	4.0	---	7.5	17.0	18.0	27.0	27.5	27.5	21.0
30	13.5	7.5	5.5	5.0	---	8.5	16.5	18.0	26.5	27.0	27.5	21.0
31	14.5	---	4.5	4.5	---	9.5	---	17.0	---	27.0	27.0	---
TOTAL	518.5	316.5	232.5	123.5	147.5	290.5	339.5	534.5	723.0	852.5	843.5	679.5
MEAN	16.5	10.5	7.5	4.0	5.5	9.5	11.5	17.0	24.0	27.5	27.0	22.5
MAX	22.0	17.0	13.5	6.0	10.0	14.5	18.0	19.5	28.5	30.0	29.5	26.5

WTR YR 1983 TOTAL 5601.5 MEAN 15.5 MAX 30.0

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	17.5	10.0	4.5	4.5	11.0	11.0	16.5	18.5	29.0	29.0	28.5
2	23.5	17.5	13.0	4.5	5.0	11.5	10.0	16.5	18.5	30.5	29.0	27.5
3	22.0	17.0	13.5	4.5	5.0	12.0	9.0	16.5	18.0	29.0	29.5	28.0
4	22.5	13.5	13.5	4.0	2.0	14.0	9.0	15.0	21.5	27.0	27.5	28.0
5	23.5	10.0	13.5	4.5	1.5	15.0	9.5	15.5	23.0	26.5	29.0	27.5
6	23.5	9.5	12.5	5.5	2.0	15.5	11.0	16.5	23.0	26.0	28.5	28.0
7	23.5	11.0	10.0	6.0	2.0	15.5	11.5	16.5	22.0	26.0	30.5	27.0
8	23.0	13.0	9.0	5.5	3.0	14.5	11.0	16.0	23.0	26.5	30.0	26.0
9	22.0	13.5	8.0	5.0	3.5	11.5	10.5	16.5	24.0	27.5	30.0	27.0
10	23.5	14.0	6.5	6.5	4.5	8.5	9.5	17.0	25.0	28.0	29.0	28.0
11	21.0	15.0	6.5	6.5	4.5	8.0	9.5	18.0	25.5	29.0	27.5	28.0
12	18.0	14.0	5.0	5.5	4.5	9.0	11.0	18.5	26.5	29.5	28.0	26.0
13	18.0	10.0	3.5	5.0	4.5	10.5	12.5	20.0	27.0	30.0	27.5	25.5
14	18.5	8.5	5.5	4.5	5.5	12.5	12.5	19.5	27.5	29.5	27.0	23.5
15	17.5	8.0	6.5	4.0	6.0	13.0	11.5	19.0	26.5	29.5	28.0	22.0
16	16.5	7.5	6.0	3.5	5.5	13.5	10.5	17.5	27.5	30.0	28.0	23.5
17	15.5	9.5	5.0	3.0	5.5	12.5	10.5	19.0	27.5	29.0	26.0	23.5
18	16.0	11.0	5.0	3.5	7.0	11.5	9.5	18.5	27.5	30.0	28.5	25.0
19	15.5	12.5	5.0	3.0	8.0	11.5	9.5	19.0	25.5	31.0	30.5	26.0
20	15.0	14.0	4.5	3.0	8.5	9.5	10.5	19.5	27.5	30.0	31.5	25.5
21	14.0	14.0	5.0	4.0	9.0	7.0	12.5	20.0	28.5	31.5	31.0	22.0
22	13.5	13.5	5.5	4.0	10.5	5.0	13.0	19.5	28.5	32.0	30.0	19.0
23	13.0	13.0	8.0	3.5	11.5	6.0	13.0	20.0	29.0	32.0	30.0	18.5
24	13.0	11.0	9.0	3.5	10.0	6.5	14.5	21.0	29.0	31.5	28.5	19.0
25	13.0	7.0	12.0	3.0	9.0	8.0	14.5	20.0	29.0	30.0	30.0	18.0
26	13.5	7.0	12.0	4.0	9.0	8.0	14.5	19.5	30.0	30.0	29.0	20.0
27	13.5	7.0	9.0	4.5	8.5	9.0	18.5	19.5	29.0	29.0	27.5	21.5
28	14.5	7.5	10.0	4.5	9.5	8.0	19.0	18.5	28.0	29.0	28.5	22.5
29	15.5	7.5	8.0	5.0	---	9.5	17.5	20.0	28.5	29.0	28.5	23.0
30	14.0	8.5	5.5	5.0	---	9.5	17.0	18.5	27.5	28.0	29.0	23.0
31	15.0	---	5.0	5.0	---	11.0	---	17.5	---	29.0	28.5	---
TOTAL	554.0	342.5	251.0	138.0	169.5	328.0	363.5	565.0	772.0	904.5	895.0	730.5
MEAN	18.0	11.5	8.0	4.5	6.0	10.5	12.0	18.0	25.5	29.0	29.0	24.5
MAX	23.5	17.5	13.5	6.5	11.5	15.5	19.0	21.0	30.0	32.0	31.5	28.5

WTR YR 1983 TOTAL 6013.5 MEAN 16.5 MAX 32.0

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.5	15.0	8.5	4.0	3.5	7.5	9.5	15.5	16.0	25.5	25.5	25.0
2	20.5	17.0	10.0	4.0	3.5	8.5	9.0	15.0	17.0	27.5	25.0	24.5
3	20.5	14.0	13.5	3.5	2.0	9.5	7.5	14.5	17.5	27.0	25.0	24.0
4	20.5	10.0	13.0	3.0	1.0	11.5	7.5	13.5	18.0	25.0	25.5	24.5
5	20.5	8.0	13.0	3.5	1.0	13.0	8.5	14.0	19.0	24.0	25.0	25.0
6	20.5	7.0	10.0	4.5	1.5	13.5	9.5	15.0	20.0	22.5	26.5	25.0
7	21.5	8.0	8.5	5.5	1.5	13.5	11.0	16.0	19.0	22.0	26.5	24.0
8	20.5	10.5	8.0	5.0	1.0	11.5	10.0	14.5	19.5	22.5	26.0	23.5
9	21.0	11.5	6.5	4.0	3.0	8.5	9.0	14.0	20.5	23.0	26.0	22.5
10	21.0	11.5	6.0	5.0	3.5	7.5	9.0	14.5	21.0	24.5	25.0	24.0
11	18.0	14.0	5.0	5.5	4.0	7.0	9.0	15.5	22.0	25.5	25.5	25.0
12	17.5	10.5	3.5	4.5	4.0	7.0	9.0	17.5	22.5	26.0	25.5	25.0
13	16.5	8.0	2.5	3.5	3.0	7.0	11.0	18.0	23.0	26.5	23.5	23.0
14	17.0	6.5	3.0	4.0	3.5	9.0	11.5	18.5	23.5	27.0	23.0	20.5
15	15.0	6.0	5.5	3.5	4.5	10.0	9.5	16.5	24.0	26.5	23.5	19.5
16	14.5	6.0	4.5	2.5	5.0	10.5	9.0	15.0	23.0	27.0	24.0	20.0
17	13.5	7.5	4.5	2.5	5.5	11.0	9.5	16.5	24.0	27.5	24.0	20.0
18	13.0	8.0	4.0	2.0	5.5	11.0	8.5	17.5	24.5	26.5	24.0	21.5
19	14.0	11.0	4.5	2.0	6.0	9.5	7.0	17.0	24.0	27.5	26.5	22.5
20	13.0	12.5	4.0	2.0	6.0	7.5	7.5	17.5	23.5	27.5	27.5	22.0
21	12.0	13.5	4.0	3.0	7.0	4.5	8.5	18.0	25.5	27.5	28.0	18.5
22	11.0	13.0	4.0	3.5	7.5	4.0	11.0	18.0	25.5	28.0	28.0	16.5
23	10.5	11.0	5.5	2.5	9.5	3.5	12.0	18.0	25.5	28.0	28.0	15.5
24	10.0	7.5	8.0	3.0	8.5	4.5	12.0	18.0	26.0	28.0	26.5	15.5
25	10.0	6.0	9.0	3.0	7.0	4.5	11.5	18.5	25.5	27.5	26.0	16.0
26	10.5	6.5	8.5	3.0	6.0	6.5	13.5	16.5	26.0	26.5	26.5	17.5
27	10.5	6.0	8.0	3.5	6.0	7.5	14.5	17.0	27.0	25.5	26.5	18.0
28	12.0	6.5	8.5	3.5	6.5	6.5	17.0	17.5	26.5	25.0	25.5	19.0
29	13.0	6.5	5.5	3.5	---	6.5	16.5	17.0	25.5	26.0	26.0	19.5
30	13.0	6.5	5.0	4.5	---	8.0	16.0	17.0	26.0	26.0	26.0	19.5
31	14.0	---	4.5	4.0	---	8.0	---	16.5	---	25.5	26.0	---
TOTAL	484.5	285.5	208.5	111.0	126.5	258.0	314.5	508.0	680.5	804.5	796.0	636.5
MEAN	15.5	9.5	6.5	3.5	4.5	8.5	10.5	16.5	22.5	26.0	25.5	21.0
MAX	21.5	17.0	13.5	5.5	9.5	13.5	17.0	18.5	27.0	28.0	28.0	25.0

WTR YR 1983 TOTAL 5214.0 MEAN 14.5 MAX 28.0

BEST COPY AVAILABLE

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN

LOCATION.--Lat 39°15'45", long 86°14'55", in SW¼NW¼ sec.31, T.10 N., R.3 E., Brown County, Hydrologic Unit 05120202, on right bank 15 ft downstream from bridge on State Highway 135, 0.3 mile south of Beanblossom, 2.7 miles upstream from North Fork Beanblossom Creek, and at mile 42.1.

DRAINAGE AREA.--14.6 mi^2.

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1965, published as Bean Blossom Creek at Bean Blossom.

REVISED RECORDS.--WSP 1555: 1952, 1953(M), 1956-57. WSP 1705: 1952(P). WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 673.65 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 15.9 ft^3/s, 14.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft^3/s June 23, 1960, gage height, 11.78 ft, from curve extended above 2,000 ft^3/s on basis of contracted-opening measurement at gage height 11.78 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 25	1615	*1320	*9.02	May 2	0515	1200	8.62
Apr. 30	2245	1050	7.99				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	.82	13	18	14	2.3	15	331	5.2	1.0	.03	.00
2	.51	.91	15	16	82	2.1	70	381	4.6	.66	.05	.00
3	.45	1.0	126	13	41	2.1	67	302	85	.58	.03	.00
4	.39	.74	106	11	24	1.9	37	67	49	2.3	.00	.00
5	.39	.66	56	9.8	20	1.9	28	37	22	1.5	.00	.00
6	.39	.58	41	8.9	16	60	42	26	16	.66	.00	.00
7	.91	.58	25	8.1	12	59	54	65	12	.45	.00	.07
8	.74	.58	18	6.5	11	31	82	91	8.9	.39	.00	.00
9	.82	.51	15	6.2	11	22	167	38	6.5	.33	.00	.00
10	.91	.51	13	6.5	10	18	66	26	4.9	.27	.00	.00
11	.74	1.0	12	5.8	8.9	16	41	21	4.0	.66	.00	.00
12	.66	8.1	9.4	4.9	7.7	14	29	18	3.0	.39	.00	.00
13	.66	4.6	7.7	4.6	6.9	12	67	30	2.4	.27	.00	.00
14	.58	2.8	7.7	4.6	6.5	11	272	103	2.1	.27	.00	.00
15	.51	2.3	26	4.3	6.2	9.4	61	139	1.7	.27	.00	.00
16	.45	1.8	57	3.3	5.5	8.1	37	60	1.5	.27	.00	.00
17	.45	1.5	29	2.9	5.2	7.7	27	34	1.4	.23	.00	.00
18	.45	1.5	22	2.5	4.6	9.4	22	26	1.2	.27	.00	.00
19	.45	1.5	20	2.3	4.3	10	18	23	1.2	.27	.00	.00
20	.58	2.6	17	2.1	4.0	16	15	17	1.1	.27	.00	.00
21	.58	22	14	2.8	3.8	62	13	15	1.0	.23	.00	.00
22	.58	20	13	27	3.8	29	12	22	.91	.27	.00	.00
23	.51	16	15	31	3.5	22	11	16	.82	.11	.00	.00
24	.45	14	23	24	3.3	18	9.4	12	.82	.19	.00	.00
25	.45	8.9	518	19	2.8	15	7.7	9.8	.66	.15	.00	.00
26	.45	9.4	120	16	2.4	14	7.3	8.1	.58	.07	.00	.00
27	.45	10	164	13	2.3	18	6.5	6.5	.66	.05	.00	.00
28	.45	53	114	11	2.4	19	6.5	13	1.2	.05	.27	.00
29	.45	27	44	10	---	16	5.8	11	1.2	.03	.19	.00
30	.45	16	26	15	---	15	138	7.7	1.7	.03	.11	.00
31	.58	---	22	13	---	14	---	6.2	---	.07	.03	---
TOTAL	17.02	230.89	1708.8	323.1	325.1	555.9	1434.2	1962.3	243.25	12.56	.71	.07
MEAN	.55	7.70	55.1	10.4	11.6	17.9	47.8	63.3	8.11	.41	.023	.002
MAX	.91	53	518	31	82	62	272	381	85	2.3	.27	.07
MIN	.39	.51	7.7	2.1	2.3	1.9	5.8	6.2	.58	.03	.00	.00
CFSM	.04	.53	3.77	.71	.80	1.23	3.27	4.34	.56	.03	.002	.000
IN.	.04	.59	4.35	.82	.83	1.42	3.65	5.00	.62	.03	.00	.00

CAL YR 1982 TOTAL 7538.79 MEAN 20.7 MAX 583 MIN .25 CFSM 1.42 IN 19.21
WTR YR 1983 TOTAL 6813.90 MEAN 18.7 MAX 518 MIN .00 CFSM 1.28 IN 17.36

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¼SE¼ sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mile west of Groveland, and 4.5 miles east of Bainbridge.

DRAINAGE AREA.--3.00 mi².

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 3.73 ft³/s, 16.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft³/s June 30, 1977, gage height, 5.75 ft; no flow at times during 1970, 1975-77, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	1930	*300	*3.52	Dec. 27	2000	177	3.12
Dec. 25	1215	272	3.39	May 2	0215	241	3.28

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.18	3.1	3.9	3.0	1.1	4.0	27	1.1	1.3	.20	.02
2	.05	.52	4.6	3.4	24	1.0	14	53	1.0	.76	.13	.01
3	.03	.81	115	2.7	8.8	1.0	10	14	2.2	.52	.08	.00
4	.02	.38	44	2.3	5.1	1.0	5.6	7.2	1.6	3.1	.07	.00
5	.02	.29	20	2.3	3.0	1.0	4.6	5.0	1.2	1.3	.06	.00
6	.02	.24	10	2.3	2.5	2.1	4.8	3.9	8.4	.64	.05	.01
7	1.1	.23	7.0	2.2	2.2	2.6	5.3	3.7	3.6	.45	.05	.01
8	.38	.21	5.0	1.8	2.0	1.9	4.2	3.3	2.3	.34	.04	.01
9	.59	.18	4.0	1.8	2.4	1.5	3.9	2.5	1.6	.25	.03	.01
10	.42	.17	3.2	2.0	2.8	1.5	3.6	2.2	1.3	.19	.03	.01
11	.27	.18	2.7	1.7	2.7	1.3	3.1	2.0	1.1	.17	.02	.01
12	.18	1.9	2.3	1.4	2.2	1.3	2.8	1.9	.97	.15	.00	.01
13	.12	.87	1.9	1.4	2.1	1.2	9.8	2.2	.81	.14	.00	.01
14	.09	.62	1.7	1.5	2.1	1.2	29	2.0	.70	.13	.00	.01
15	.07	.47	1.8	1.3	2.0	1.1	8.0	1.9	.67	.12	.00	.01
16	.05	.40	4.0	1.1	2.0	1.0	5.3	1.6	.56	.11	.00	.01
17	.04	.38	3.0	.96	1.8	.97	4.6	1.3	.47	.11	.01	.00
18	.03	.34	2.5	.86	1.8	1.6	3.9	1.3	.45	.10	.01	.00
19	.03	.34	2.0	.81	1.8	1.7	3.3	4.0	3.3	2.0	.00	.00
20	.10	.52	1.8	.80	1.6	7.2	2.7	2.2	1.1	1.1	.00	.03
21	.16	1.1	1.7	.89	1.5	9.8	2.5	1.7	.78	.23	.00	.02
22	.13	1.0	1.6	1.7	1.6	5.0	2.2	8.0	.59	.13	.00	.00
23	.10	3.9	2.3	1.9	1.7	3.9	2.1	3.4	.47	.11	.00	.00
24	.08	3.7	40	1.6	1.5	3.4	1.9	2.3	.40	.10	.00	.00
25	.08	2.1	121	1.4	1.2	2.8	1.6	2.0	.33	.09	.00	.00
26	.08	4.2	14	1.3	1.1	2.6	1.5	1.6	.27	.08	.00	.00
27	.06	4.0	39	1.2	1.1	5.0	1.5	1.4	.26	.08	.00	.00
28	.08	11	32	1.1	1.1	5.0	1.9	2.6	.27	.07	.45	.00
29	.08	5.6	8.4	1.2	---	3.9	1.6	1.8	1.9	.07	.02	.00
30	.06	3.9	5.6	2.3	---	3.4	5.9	1.4	5.3	.70	.02	.00
31	.10	---	4.6	1.5	---	3.2	---	1.4	---	.62	.01	---
TOTAL	4.68	49.73	509.8	52.64	86.7	81.27	155.2	169.8	45.00	15.26	1.28	.19
MEAN	.15	1.66	16.4	1.70	3.10	2.62	5.17	5.48	1.50	.49	.041	.006
MAX	1.1	11	121	3.9	24	9.8	29	53	8.4	3.1	.45	.03
MIN	.02	.17	1.6	.80	1.1	.97	1.5	1.3	.26	.07	.00	.00
CFSM	.05	.55	5.47	.57	1.03	.87	1.72	1.83	.50	.16	.01	.002
IN.	.06	.62	6.32	.65	1.07	1.01	1.92	2.10	.56	.19	.02	.00

CAL YR 1982 TOTAL 2128.56 MEAN 5.83 MAX 136 MIN .02 CFSM 1.94 IN 26.39
WTR YR 1983 TOTAL 1171.55 MEAN 3.21 MAX 121 MIN .00 CFSM 1.07 IN 14.52

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW¼SW¼ sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 miles southwest of Reelsville, and 4.1 miles upstream from Mill Creek.

DRAINAGE AREA.--326 mi².

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

AVERAGE DISCHARGE.--34 years, 348 ft³/s, 14.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s June 28, 1957, gage height, 18.63 ft, from rating curve extended above 18,000 ft³/s on basis of slope-conveyance method; minimum daily, 1.4 ft³/s Sept. 8, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0100	6350	13.38	May 2	1100	4470	11.07
Dec. 25	2000	*6670	*13.75	June 19	0800	5770	12.70
Apr. 14	1300	3460	9.68				

Minimum daily discharge, 17 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	241	733	272	146	366	712	175	660	82	30
2	25	31	397	625	1140	146	997	3770	158	343	62	25
3	25	53	2750	543	1300	142	1280	2180	256	222	45	22
4	24	49	4260	469	737	140	922	1370	325	256	39	21
5	24	42	2800	433	514	136	696	930	221	522	38	21
6	24	36	1650	404	456	239	676	692	930	311	38	21
7	66	33	1040	382	388	246	688	565	652	197	35	30
8	61	32	780	348	313	236	633	514	401	138	33	47
9	57	32	629	322	300	202	543	397	294	114	32	28
10	50	31	536	319	290	187	504	342	241	101	30	23
11	40	30	493	302	280	180	466	305	202	93	30	21
12	35	58	413	316	260	165	407	272	175	84	39	20
13	33	75	354	299	254	156	610	311	154	81	45	20
14	33	61	345	294	251	152	2950	288	138	72	36	19
15	32	50	351	286	246	146	1780	272	127	67	32	18
16	28	44	401	259	236	142	1060	241	122	64	29	18
17	27	41	382	240	231	138	816	207	112	60	34	18
18	26	36	363	220	219	158	676	217	103	60	48	18
19	26	35	348	211	217	207	554	267	2750	57	46	17
20	30	36	322	210	212	369	469	272	926	204	37	19
21	31	40	297	226	200	1080	417	234	529	103	32	40
22	28	57	278	252	191	766	373	536	354	69	29	34
23	29	99	294	294	191	525	351	493	278	58	31	27
24	28	180	1760	287	187	417	325	397	221	56	28	23
25	27	123	5210	272	175	351	294	302	184	51	27	21
26	27	116	4660	254	158	311	275	256	161	46	27	19
27	27	180	3090	244	150	469	256	221	144	43	26	19
28	26	382	4190	228	146	668	267	256	138	41	114	19
29	26	430	2030	229	---	480	272	256	217	39	71	18
30	26	297	1220	281	---	397	288	207	716	49	43	18
31	26	---	905	267	---	354	---	191	---	74	34	---
TOTAL	993	2737	42789	10049	9514	9451	20211	17473	11404	4335	1272	694
MEAN	32.0	91.2	1380	324	340	305	674	564	380	140	41.0	23.1
MAX	66	430	5210	733	1300	1080	2950	3770	2750	660	114	47
MIN	24	28	241	210	146	136	256	191	103	39	26	17
CFSM	.10	.28	4.23	.99	1.04	.94	2.07	1.73	1.17	.43	.13	.07
IN.	.11	.31	4.88	1.15	1.09	1.08	2.31	1.99	1.30	.49	.15	.08

CAL YR 1982 TOTAL 195119 MEAN 535 MAX 5210 MIN 24 CFSM 1.64 IN 22.27
WTR YR 1983 TOTAL 130922 MEAN 359 MAX 5210 MIN 17 CFSM 1.10 IN 14.94

03358000 MILL CREEK NEAR CATARACT, IN

LOCATION.--Lat 39°26'00", long 86°45'48", in NE¼SE¼ sec.32, T.12 N., R.3 W., Owen County, Hydrologic Unit 05120203, on right bank at downstream side of bridge on U.S. Highway 231, 3 miles east of Cataract, and at mile 17.5.

DRAINAGE AREA.--245 mi².

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--Records good except those below 15 ft³/s, which are poor.

AVERAGE DISCHARGE.--34 years, 262 ft³/s, 14.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s June 24, 1960, gage height, 22.58 ft; minimum daily, 0.1 ft³/s Sept. 7, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 5	0200	3340	13.87	Apr. 14	1800	2890	13.11
Dec. 26	0500	*4770	*16.01	May 2	1100	3010	13.32

Minimum daily discharge, 2.1 ft³/s Sept. 13, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	219	334	169	84	195	1420	77	38	15	4.6
2	11	19	217	282	1530	82	904	2840	67	29	9.0	3.6
3	12	32	1220	237	1520	78	1200	2380	231	25	7.0	3.2
4	14	28	3020	199	503	76	610	970	390	28	6.0	3.0
5	13	19	3110	185	320	74	413	510	162	83	5.5	2.9
6	14	15	1840	175	280	89	492	360	220	41	5.0	2.8
7	21	14	724	172	237	123	713	293	192	27	4.7	11
8	38	13	440	148	177	130	518	278	125	23	4.5	14
9	29	14	325	139	189	120	386	240	98	20	4.3	6.2
10	28	14	274	145	197	100	350	199	82	15	4.2	4.1
11	24	15	251	140	220	90	308	180	72	13	4.0	3.1
12	19	45	206	123	199	84	254	167	65	12	5.2	2.5
13	19	124	167	109	173	77	414	162	59	11	5.8	2.1
14	16	59	155	110	163	74	2630	170	54	10	5.0	2.5
15	15	42	162	108	160	73	2050	263	52	9.5	4.3	2.5
16	14	35	346	88	153	70	579	270	50	9.0	3.9	2.5
17	13	31	284	80	147	67	394	213	45	8.5	6.6	2.3
18	13	28	239	72	137	81	309	176	41	8.2	9.7	2.3
19	13	27	219	70	131	123	251	159	49	8.0	11	2.1
20	14	28	191	71	127	220	213	154	91	11	8.0	2.1
21	16	33	153	78	119	1380	191	139	52	9.5	6.0	5.5
22	17	54	147	124	113	524	181	159	41	8.7	4.3	4.0
23	15	94	158	206	112	315	172	222	36	7.8	4.1	3.4
24	15	286	1250	157	108	248	165	170	33	7.2	5.6	3.2
25	14	150	3810	137	103	204	149	140	31	6.7	6.3	3.0
26	14	112	4560	119	95	187	131	100	28	6.2	4.8	2.9
27	13	216	3160	111	89	214	118	90	26	5.9	4.1	2.8
28	13	515	2960	101	85	355	112	86	26	5.6	45	2.7
29	13	562	2130	102	---	257	113	150	62	5.4	33	2.7
30	13	308	724	175	---	211	161	110	45	7.0	11	2.7
31	14	---	433	176	---	195	---	90	---	16	6.1	---
TOTAL	509	2947	33104	4473	7556	6005	14676	12860	2602	515.2	259.0	112.3
MEAN	16.4	98.2	1068	144	270	194	489	415	86.7	16.6	8.35	3.74
MAX	38	562	4560	334	1530	1380	2630	2840	390	83	45	14
MIN	11	13	147	70	85	67	112	86	26	5.4	3.9	2.1
CFSM	.07	.40	4.36	.59	1.10	.79	2.00	1.69	.35	.07	.03	.02
IN.	.08	.45	5.03	.68	1.15	.91	2.23	1.95	.40	.08	.04	.02

CAL YR 1982 TOTAL 139129.0 MEAN 381 MAX 4560 MIN 11 CFSM 1.56 IN 21.12
WTR YR 1983 TOTAL 85618.5 MEAN 235 MAX 4560 MIN 2.1 CFSM .96 IN 13.00

03358900 CAGLES MILL LAKE NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'14", long 86°55'02", in NE¼NW¼ sec.13, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in discharge tower of reservoir on Mill Creek, 1.5 miles upstream from Deer Creek, 2.7 miles above mouth, and 5.8 miles south of Manhattan.

DRAINAGE AREA.--293 mi².

PERIOD OF RECORD.--July 1953 to September 1983 (discontinued). Prior to September 1970, published as Cagles Mill "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1975, at datum 18.17 ft lower.

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 5 ft wide and 10 ft high, in 12 ft by 12 ft concrete-lined tunnel 496 ft long through right abutment. Minimum design capacity is 27,110 acre-ft, elevation, 636 ft. Capacity at uncontrolled spillway elevation, 704 ft is 228,000 acre-ft. Reservoir is used for flood control and recreation. Reservoir put in operation on July 6, 1953.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 165,210 acre-ft Aug. 30, 1979, elevation, 689.61 ft; minimum, 21,700 acre-ft Oct. 21-26, 1964, elevation, 631.89 ft. Pool lowered to elevation, 597.57 ft Oct. 23, 1971 (contents, dry) due to drainage of lake to kill fish.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 71,680 acre-ft Jan. 2, elevation, 659.48 ft; minimum, 24,570 acre-ft Sept. 30, elevation, 634.13 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	636.12	27,280	
Oct. 31	636.20	27,400	+120
Nov. 30	636.30	27,540	+140
Dec. 31	659.04	70,650	+43,110
CAL YR 1982			+37,120
Jan. 31	636.35	27,610	-43,040
Feb. 28	636.08	27,230	-,380
Mar. 31	636.18	27,370	+140
Apr. 30	638.63	30,940	+3,570
May 31	636.20	27,400	-3,540
June 30	636.26	27,480	+80
July 31	635.68	26,670	-810
Aug. 31	635.13	25,920	-750
Sept. 30	634.23	24,700	-1,220
WTR YR 1983			-2,580

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW¼SE¼ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 200 ft downstream from Cagles Mill, 0.7 mile downstream from Cagles Mill Lake, 0.8 mile upstream from Deer Creek, 5.8 miles south of Manhattan, and at mile 2.0.

DRAINAGE AREA.--294 mi^2.

PERIOD OF RECORD.--May to September 1931 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.,

REVISED RECORDS.--WSP 1335: 1940-41. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 581.83 ft National Geodetic Vertical Datum of 1929. May 12, 1941 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. See WSP 1725 for history of changes prior to May 12, 1941.

REMARKS.--Flow regulated by Cagles Mill Lake (See sta 03358900). Daily discharge computed from relation between discharge, head, and gate openings for Cagles Mill Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--45 years (1938 to current year), 306 ft^3/s, 14.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s Jan. 5, 1950, gage height, 18.38 ft; no flow Aug. 7, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,930 ft^3/s Jan. 11; minimum daily, 15 ft^3/s Sept. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	322	46	288	98	238	256	165	47	18	17
2	18	18	167	375	296	99	271	124	99	47	18	17
3	18	18	171	566	315	116	212	128	100	47	17	17
4	18	18	80	526	606	114	292	130	155	47	17	17
5	18	18	103	852	1060	82	433	131	260	47	17	16
6	18	18	85	1290	1050	294	512	131	349	47	17	16
7	18	18	302	1170	1040	277	450	132	493	47	17	16
8	18	18	761	1510	1020	136	330	132	619	47	17	16
9	18	18	956	1500	702	121	331	132	354	47	17	16
10	18	18	950	1720	338	148	179	132	82	46	17	16
11	18	18	944	1930	410	120	104	648	83	46	17	16
12	18	50	937	1910	264	98	246	960	83	39	17	16
13	18	81	1190	1870	204	98	304	953	83	31	17	16
14	18	101	1350	1840	204	99	167	769	83	31	17	16
15	18	202	1340	1810	204	99	109	473	83	22	17	16
16	18	181	1320	1780	204	99	110	767	83	18	17	16
17	18	44	1310	1740	204	99	111	1220	73	18	17	16
18	18	18	1290	1700	176	124	111	1370	51	18	17	16
19	18	18	1270	1520	123	149	111	1350	46	18	17	16
20	19	27	1250	1090	99	149	112	1450	47	18	17	16
21	18	41	1080	432	99	288	777	1530	47	18	17	16
22	18	58	504	175	99	576	1650	1510	47	18	17	16
23	18	87	139	251	152	1080	1860	1480	47	18	17	16
24	18	194	129	251	205	1230	1820	1450	47	18	17	16
25	18	253	55	182	167	787	1790	896	47	18	17	16
26	18	252	41	148	98	205	1760	337	47	18	17	15
27	18	251	42	148	98	229	1720	155	33	18	17	15
28	18	241	44	148	98	333	1230	82	33	18	17	15
29	18	628	45	128	---	602	534	100	47	18	17	15
30	18	824	45	108	---	572	531	173	47	18	17	15
31	18	---	45	199	---	204	---	202	---	18	17	---
TOTAL	559	3749	18267	28915	9823	8725	18405	19303	3833	926	529	479
MEAN	18.0	125	589	933	351	281	614	623	128	29.9	17.1	16.0
MAX	19	824	1350	1930	1060	1230	1860	1530	619	47	18	17
MIN	18	18	41	46	98	82	104	82	33	18	17	15
CFSM	.06	.43	2.00	3.17	1.19	.96	2.09	2.12	.44	.10	.06	.05
IN.	.07	.47	2.31	3.66	1.24	1.10	2.33	2.44	.48	.12	.07	.06

CAL YR 1982 TOTAL 166767 MEAN 457 MAX 2050 MIN 18 CFSM 1.55 IN 21.10
WTR YR 1983 TOTAL 113513 MEAN 311 MAX 1930 MIN 15 CFSM 1.06 IN 14.36

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE¼NE¼ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft downstream from bridge on State Highway 46 at Bowling Green, 0.2 mile downstream from Jordan Creek, and at mile 38.4.

DRAINAGE AREA.--830 mi².

PERIOD OF RECORD.--January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS.--WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.02 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Records poor. Flow regulated by Cagles Mill Lake (See sta 03358900).

AVERAGE DISCHARGE.--52 years, 873 ft³/s, 14.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s Jan. 4, 1950, gage height, 23.53 ft; minimum daily, 11 ft³/s Oct. 7, 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 30.0 ft in 1875, present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft³/s Dec. 26, gage height, 18.80 ft; minimum daily, 42 ft³/s Sept. 19, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	70	1150	1200	671	338	886	1020	511	855	126	73
2	75	69	642	1120	1170	332	1150	1300	405	512	129	64
3	73	110	1150	1290	1880	325	2000	5200	788	357	99	61
4	72	101	2460	1190	1800	358	3500	2360	987	295	86	57
5	71	95	5900	1200	1570	315	1800	1550	697	573	80	57
6	68	87	3660	1610	1550	423	1530	1190	1590	514	79	55
7	71	82	2010	1860	1570	649	1590	1010	1650	340	77	58
8	130	78	1820	1860	1480	618	1530	994	1260	273	73	81
9	126	76	1740	1820	1330	477	1330	840	1060	241	70	83
10	120	73	1670	1880	966	459	1190	741	540	222	68	64
11	112	60	1630	2130	885	455	1010	851	433	207	67	56
12	98	62	1650	2090	807	390	883	1360	386	198	67	52
13	87	80	1690	2050	634	364	900	1460	352	179	80	50
14	82	150	1690	2010	605	349	1720	1580	324	169	78	48
15	80	160	1720	1990	594	339	4200	1240	302	158	70	46
16	79	340	1840	1920	581	325	2200	1100	289	144	66	46
17	76	160	1760	1860	569	313	1670	1410	276	136	70	45
18	74	105	1690	1800	552	324	1280	1610	252	130	90	45
19	71	70	1650	1670	503	434	1050	1630	281	127	87	42
20	72	89	1550	1330	445	498	889	1680	3900	141	82	43
21	74	110	1360	901	424	780	810	1720	1600	240	70	76
22	75	146	999	544	413	1100	1100	1820	900	152	65	85
23	74	190	571	671	407	1120	2100	2040	620	123	62	71
24	74	246	1030	686	478	1520	2300	2020	510	114	71	61
25	73	370	3220	642	482	1700	2150	1740	450	110	63	53
26	72	365	8730	530	389	1000	2100	855	405	104	61	49
27	71	360	5620	490	349	851	2060	626	381	94	58	48
28	71	543	5390	476	344	1100	1960	513	359	90	108	46
29	70	901	4280	476	---	1280	1320	607	356	86	176	44
30	70	1170	2070	503	---	1450	952	514	386	84	115	42
31	70	---	1480	544	---	1300	---	534	---	115	85	---
TOTAL	2511	6518	73822	40343	23448	21286	49160	43115	22250	7083	2578	1701
MEAN	81.0	217	2381	1301	837	687	1639	1391	742	228	83.2	56.7
MAX	130	1170	8730	2130	1880	1700	4200	5200	3900	855	176	85
MIN	68	60	571	476	344	313	810	513	252	84	58	42
CFSM	.10	.26	2.87	1.57	1.01	.83	1.98	1.68	.89	.28	.10	.07
IN.	.11	.29	3.31	1.81	1.05	.95	2.20	1.93	1.00	.32	.12	.08

CAL YR 1982 TOTAL 451066 MEAN 1236 MAX 9560 MIN 60 CFSM 1.49 IN 20.22
WTR YR 1983 TOTAL 293815 MEAN 805 MAX 8730 MIN 42 CFSM .97 IN 13.17

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'39", long 87°00'41", in NE¼NW¼ sec.30, T.6 N., R.5 W., Greene County, Hydrologic Unit 05120202, on left bank 0.4 mi upstream from bridge on State Highway 57 at Newberry, 1.9 miles downstream from Doans Creek, and at mile 113.0.

DRAINAGE AREA.--4,688 mi².

PERIOD OF RECORD.--September 1928 to current year. Prior to October 1948, published as West Fork White River at Newberry.

REVISED RECORDS.--WSP 873: 1937(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 465.59 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1982, gage was 0.3 mile downstream at same datum. Gage was nonrecording prior to Oct. 21, 1928.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--55 years, 4,716 ft³/s, 13.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft³/s May 21, 1943, gage height, 24.19 ft; minimum daily, 200 ft³/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft Mar. 27, 1913, from floodmarks by Indiana Department of Highways, discharge, 130,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,400 ft³/s Dec. 29, gage height, 20.74 ft; minimum daily, 457 ft³/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	675	659	4200	21000	3750	2290	4370	13200	3510	2000	1360	850
2	683	734	3860	12600	7960	2230	6350	22500	3290	3070	1120	740
3	691	917	7640	8320	12000	2170	9950	28900	4210	2820	988	680
4	691	1050	17000	7160	11800	2170	10800	29900	9060	2470	943	650
5	675	917	19800	6360	9450	2100	9910	28500	7550	2330	890	620
6	659	846	20900	5820	7880	2800	9620	26000	5440	2560	838	590
7	742	785	19800	5790	7010	3550	10000	22200	6120	2780	838	580
8	1170	768	14900	5780	6110	3940	10300	16300	5260	2270	838	600
9	1330	768	8870	5550	5580	3610	10900	9890	4420	1980	803	723
10	1770	659	6610	5350	5310	3090	11500	8060	3880	1810	760	784
11	1380	651	5750	5240	4730	2810	11800	6880	3230	1620	742	715
12	1080	917	5150	5230	4410	2670	10500	6220	2820	1480	659	655
13	899	1700	4600	5120	4110	2470	9580	6570	2580	1370	760	617
14	961	1610	4240	4920	3760	2370	15500	7840	2400	1250	1050	584
15	1280	1330	4340	4820	3590	2270	18200	9470	2270	1200	908	550
16	1200	1140	5340	4640	3460	2170	18800	8770	2140	1180	811	526
17	997	1100	5500	4500	3390	2070	18100	7270	2030	1100	768	519
18	899	1140	5300	4330	3260	2100	14000	6500	1930	1030	760	500
19	855	1020	5040	4110	3200	2300	9730	6060	1870	1050	751	494
20	811	952	4980	3920	3100	2720	7730	5690	3070	1080	855	480
21	785	1030	4770	3660	3030	6990	6630	5400	3980	1140	846	473
22	751	1420	4440	3770	2910	8930	5960	6790	3210	1620	785	471
23	734	1360	4010	4020	2860	7880	6150	7680	2980	1360	734	477
24	734	2140	4570	4390	2730	6640	6170	7870	2570	1190	717	518
25	717	2380	14100	4260	2750	6150	5900	7080	2270	1020	717	509
26	708	2260	25600	3940	2670	5490	5640	6350	2020	961	760	473
27	667	2730	29300	3580	2500	4760	5310	5180	1890	935	708	473
28	643	4240	33600	3410	2370	6010	5070	4540	1780	988	734	461
29	620	6020	35400	3250	---	6200	4830	4490	1690	961	760	457
30	612	5060	31900	3900	---	5310	5210	4200	1760	917	970	457
31	620	---	27400	4010	---	4900	---	3810	---	1030	988	---
TOTAL	27039	48303	388910	172750	135680	121160	284510	340110	101230	48572	26161	17226
MEAN	872	1610	12550	5573	4846	3908	9484	10970	3374	1567	844	574
MAX	1770	6020	35400	21000	12000	8930	18800	29900	9060	3070	1360	850
MIN	612	651	3860	3250	2370	2070	4370	3810	1690	917	659	457
CFSM	.19	.34	2.68	1.19	1.03	.83	2.02	2.34	.72	.33	.18	.12
IN.	.21	.38	3.09	1.37	1.08	.96	2.26	2.70	.80	.39	.21	.14

CAL YR 1982 TOTAL 2447927 MEAN 6707 MAX 35400 MIN 612 CFSM 1.43 IN 19.42
WTR YR 1983 TOTAL 1711651 MEAN 4689 MAX 35400 MIN 457 CFSM 1.00 IN 13.58

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft upstream from highway bridge, 0.5 mile northwest of Carthage, 2.2 miles downstream from Three Mile Creek, and at mile 50.7.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft National Geodetic Vertical Datum of 1929. Prior to July 19, 1951, nonrecording gage at site 300 ft downstream at same datum.

REMARKS.--Records good. Flow partly regulated by Big Blue River Conservancy District control structures on tributaries to Big Blue River beginning in 1969.

AVERAGE DISCHARGE.--33 years, 197 ft^3/s, 14.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft^3/s Mar. 4, 1963, gage height, 14.62 ft, from floodmarks, from rating curve extended above 6,200 ft^3/s; minimum daily, 17 ft^3/s Jan. 18, Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s and maximum (*);

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	1700	*2110	*7.33

Minimum daily discharge, 35 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	64	141	255	136	91	106	1050	118	499	59	43
2	57	68	121	215	400	90	165	1750	112	209	56	41
3	57	87	138	187	473	88	286	1150	122	148	54	40
4	57	68	277	167	284	90	239	694	124	194	56	39
5	56	64	301	156	198	87	187	481	110	281	57	39
6	68	62	332	149	174	102	199	368	109	148	55	38
7	80	61	215	147	158	98	507	320	107	117	52	48
8	79	61	160	136	141	96	434	417	100	104	49	41
9	76	61	132	132	134	90	394	304	96	96	48	40
10	76	60	118	132	132	88	424	254	94	91	45	38
11	77	62	114	129	127	87	372	224	92	87	97	37
12	93	88	98	123	121	86	297	204	92	84	68	37
13	105	81	91	116	114	84	269	190	88	80	55	38
14	105	68	88	114	114	84	1030	188	87	76	51	37
15	100	64	95	114	114	83	849	250	86	75	50	36
16	104	62	268	108	114	81	475	196	85	73	49	39
17	105	61	217	108	114	80	374	171	82	71	54	38
18	104	60	167	100	110	89	300	161	81	79	60	37
19	104	60	163	95	110	89	252	164	153	91	52	35
20	106	74	174	90	108	89	214	155	110	118	49	37
21	103	112	141	96	104	251	190	145	90	84	45	48
22	99	98	123	132	102	194	175	198	82	73	45	41
23	96	134	121	152	104	146	169	204	79	71	53	40
24	94	174	123	156	100	128	159	159	76	105	47	40
25	91	110	320	143	96	117	148	150	73	81	44	40
26	88	100	574	132	92	110	141	143	70	71	43	41
27	82	121	827	125	90	114	137	133	70	65	47	42
28	67	251	1210	118	91	127	152	133	105	62	57	41
29	62	308	706	114	---	113	142	131	290	60	50	40
30	61	190	425	138	---	107	200	124	431	58	45	40
31	61	---	317	145	---	105	---	122	---	59	44	---
TOTAL	2571	2934	8297	4224	4155	3284	8986	10333	3414	3510	1636	1191
MEAN	82.9	97.8	268	136	148	106	300	333	114	113	52.8	39.7
MAX	106	308	1210	255	473	251	1030	1750	431	499	97	48
MIN	56	60	88	90	90	80	106	122	70	58	43	35
CFSM	.45	.53	1.46	.74	.80	.58	1.63	1.81	.62	.61	.29	.22
IN.	.52	.59	1.68	.85	.84	.66	1.82	2.09	.69	.71	.33	.24

CAL YR 1982 TOTAL 87763 MEAN 240 MAX 2940 MIN 55 CFSM 1.30 IN 17.74
WTR YR 1983 TOTAL 54535 MEAN 149 MAX 1750 MIN 35 CFSM .81 IN 11.03

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile downstream from bridge on State Highway 9 in Shelbyville, 0.6 mile downstream from Little Blue River, and at mile 23.9.

DRAINAGE AREA.--421 mi².

PERIOD OF RECORD.--September 1943 to current year. Prior to October 1961, published as Blue River at Shelbyville.

REVISED RECORDS.--WSP 1505: 1944. WSP 1909: 1959(M). WSP 2109: Drainage area. WDR IN-79-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 737.67 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mile upstream at datum 3.5 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--40 years, 461 ft³/s, 14.87 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s Mar. 5, 1963, gage height, 17.70 ft; minimum daily, 27 ft³/s Jan. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	1200	*3620	*11.29

Minimum daily discharge, 47 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	82	300	671	307	177	219	1620	239	883	94	59
2	68	92	210	546	649	177	272	3020	227	450	85	57
3	68	100	210	468	1150	172	558	3380	236	291	82	55
4	67	118	350	406	768	169	570	2360	248	246	81	55
5	68	94	500	357	503	169	457	1550	227	475	82	54
6	68	92	600	330	413	188	446	1100	210	341	81	53
7	86	86	500	317	367	213	844	948	204	238	79	55
8	105	86	350	294	313	196	1140	1290	197	196	77	56
9	100	86	281	272	294	185	1110	1000	183	176	74	55
10	100	86	251	269	297	172	1320	755	172	162	72	53
11	98	92	239	269	291	162	1150	611	164	152	84	52
12	100	100	219	263	272	149	897	526	160	143	135	51
13	118	134	180	254	257	147	759	472	153	135	98	50
14	127	114	172	248	254	147	1790	450	145	127	76	49
15	127	100	180	248	254	139	2380	507	140	122	72	48
16	120	87	310	236	248	134	1470	468	138	119	70	48
17	132	82	442	230	248	132	1050	399	134	117	70	49
18	127	80	353	213	239	147	813	357	129	123	72	49
19	127	80	317	200	236	157	658	347	131	119	74	47
20	134	100	323	195	233	157	546	337	219	155	70	48
21	132	130	300	210	219	420	476	310	156	155	67	49
22	127	110	266	245	213	526	424	364	132	116	65	54
23	127	130	248	310	219	364	392	431	121	105	63	52
24	125	150	245	347	213	300	367	357	114	103	64	51
25	120	180	374	337	202	266	333	313	108	131	63	51
26	118	140	1330	304	188	242	313	300	102	115	61	51
27	114	127	1390	278	177	245	297	278	101	99	60	51
28	107	200	2350	263	172	257	304	269	126	93	69	52
29	88	320	1960	254	---	242	307	269	358	88	69	51
30	82	400	1270	260	---	221	503	257	395	85	64	50
31	82	---	875	304	---	219	---	245	---	98	61	---
TOTAL	3231	3778	16895	9398	9196	6591	22165	24890	5369	5958	2334	1555
MEAN	104	126	545	303	328	213	739	803	179	192	75.3	51.8
MAX	134	400	2350	671	1150	526	2380	3380	395	883	135	59
MIN	67	80	172	195	172	132	219	245	101	85	60	47
CFSM	.25	.30	1.30	.72	.78	.51	1.76	1.91	.43	.46	.18	.12
IN.	.29	.33	1.49	.83	.81	.58	1.96	2.20	.47	.53	.21	.14

CAL YR 1982 TOTAL 192144 MEAN 526 MAX 7180 MIN 66 CFSM 1.25 IN 16.98
WTR YR 1983 TOTAL 111360 MEAN 305 MAX 3380 MIN 47 CFSM .72 IN 9.84

03361650 SUGAR CREEK AT NEW PALESTINE, IN

LOCATION.--Lat 39°42'51", long 85°53'08", in SE¼SW¼ sec.29, T.15 N., R.6 E., Hancock County, Hydrologic Unit 05120204, on left bank 10 ft downstream from bridge on County Road 450 West, 0.5 mile south of New Palestine, 3.1 miles upstream from Little Sugar Creek, and 37.3 miles upstream from mouth.

DRAINAGE AREA.--93.9 mi².

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 101 ft³/s, 14.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s June 23, 1974, gage height, 9.12 ft; maximum gage height, 10.34 ft Feb. 23, 1979 (ice jam); minimum daily discharge, 2.6 ft³/s Sept. 15, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	1800	*1150	*7.51

Minimum daily discharge, 2.6 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	9.9	50	120	51	32	60	335	38	21	8.1	5.0
2	6.3	14	40	99	156	32	107	884	35	41	6.6	4.2
3	6.5	12	42	86	236	31	193	1100	36	30	6.2	3.6
4	6.8	11	71	75	166	30	184	837	38	34	5.9	3.4
5	6.7	11	120	68	108	32	139	448	34	43	6.1	3.3
6	6.3	11	127	64	91	36	122	272	33	55	5.8	3.7
7	7.4	12	108	61	78	39	191	197	31	38	5.8	3.6
8	8.1	10	71	56	69	41	233	173	29	27	5.1	4.6
9	8.8	10	55	52	61	39	302	150	27	21	5.0	3.8
10	8.8	10	46	52	59	36	307	118	25	19	4.6	3.3
11	9.2	11	42	51	56	33	254	101	23	17	13	3.1
12	8.2	17	37	48	53	32	198	91	22	16	14	3.1
13	7.9	17	33	43	50	30	165	82	21	14	8.7	2.9
14	8.3	14	29	41	48	29	352	83	20	13	6.7	2.8
15	8.2	13	33	40	48	28	393	88	19	12	5.6	2.6
16	7.7	13	50	37	47	27	260	76	19	12	5.6	2.9
17	7.3	12	90	35	46	26	179	67	18	13	6.2	3.3
18	12	12	74	34	44	31	140	62	17	12	7.1	3.3
19	6.6	11	64	32	43	34	114	60	17	12	6.2	3.0
20	8.3	13	61	30	42	39	95	57	18	23	5.7	3.1
21	8.1	16	63	35	40	130	83	54	17	18	5.1	3.1
22	7.6	16	54	39	39	163	75	94	16	11	4.8	3.4
23	7.6	21	48	45	39	110	70	114	15	9.4	4.8	3.6
24	7.4	23	51	51	39	84	65	78	14	9.0	4.6	3.6
25	11	32	168	54	37	71	59	64	13	9.0	4.4	3.6
26	8.5	29	281	49	35	63	54	56	12	11	4.1	3.6
27	7.9	25	359	44	33	64	52	51	12	11	4.9	3.6
28	7.2	42	460	40	32	71	51	48	12	8.6	11	3.4
29	8.3	66	411	38	---	66	51	46	16	7.4	7.9	3.2
30	8.6	73	230	42	---	62	57	43	17	6.6	5.9	2.8
31	9.1	---	153	44	---	60	---	41	---	7.0	5.8	---
TOTAL	247.5	586.9	3521	1605	1846	1601	4605	5970	664	581.0	201.3	102.5
MEAN	7.98	19.6	114	51.8	65.9	51.6	154	193	22.1	18.7	6.49	3.42
MAX	12	73	460	120	236	163	393	1100	38	55	14	5.0
MIN	6.3	9.9	29	30	32	26	51	41	12	6.6	4.1	2.6
CFSM	.09	.21	1.21	.55	.70	.55	1.64	2.06	.24	.20	.07	.04
IN.	.10	.23	1.39	.64	.73	.63	1.92	2.37	.26	.23	.08	.04

CAL YR 1982 TOTAL 42714.8 MEAN 117 MAX 1550 MIN 6.1 CFSM 1.25 IN 16.92
WTR YR 1983 TOTAL 21531.2 MEAN 59.0 MAX 1100 MIN 2.6 CFSM .63 IN 8.53

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼SE¼ sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft downstream from McGregor Road bridge, 0.5 mile east of Acton, and 4.1 miles upstream from mouth.

DRAINAGE AREA.--78.8 mi².

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-79-1: 1969 (M).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 90.1 ft³/s, 15.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s July 20, 1969, gage height, 14.99 ft; minimum daily, 0.60 ft³/s Oct. 1, 4, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1030	*885	*7.05

Minimum daily discharge, 1.2 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.8	14	91	56	17	39	227	22	26	3.3	2.1
2	2.8	4.5	15	73	323	16	171	676	22	15	4.4	2.7
3	6.2	18	45	61	247	16	255	612	24	12	4.6	2.7
4	2.7	8.9	125	55	126	18	157	338	35	23	4.6	2.7
5	1.6	5.6	116	49	84	18	110	187	23	60	4.7	2.1
6	1.9	5.0	92	40	72	36	107	128	20	23	3.6	1.5
7	6.8	8.2	50	39	60	35	276	100	21	15	2.5	2.2
8	5.6	5.0	38	37	43	30	206	101	18	12	2.9	2.6
9	3.3	2.9	30	35	41	26	370	71	14	11	4.3	3.4
10	9.6	2.9	22	38	41	23	300	59	15	9.5	4.3	3.3
11	3.5	5.9	25	35	43	21	190	52	14	8.9	14	3.3
12	2.9	16	22	30	41	19	137	47	13	8.1	11	3.3
13	2.3	21	17	23	37	19	127	46	11	7.8	4.7	1.9
14	3.5	10	12	23	38	19	495	55	13	6.7	3.2	1.4
15	6.8	4.0	14	23	37	18	262	88	13	8.7	1.6	3.4
16	6.2	2.3	84	19	35	17	150	59	9.5	6.4	2.5	2.6
17	4.2	3.8	62	18	32	16	117	44	12	6.5	3.5	1.4
18	2.9	5.6	50	17	27	24	92	35	9.8	4.8	5.5	3.1
19	2.3	3.3	48	16	32	29	77	38	8.9	5.8	3.2	2.3
20	4.0	5.0	46	15	28	33	65	34	13	9.1	2.8	2.1
21	7.8	12	35	18	25	227	57	30	12	6.0	1.8	1.4
22	5.6	10	26	50	23	134	50	125	9.5	5.2	1.3	3.0
23	4.2	13	29	77	23	83	47	129	5.8	4.9	2.0	1.9
24	8.5	26	73	74	22	65	42	78	9.8	4.4	3.2	1.3
25	5.9	9.6	457	61	19	53	35	57	6.7	3.2	2.8	3.2
26	3.5	8.5	417	50	17	44	35	46	4.1	4.7	2.8	3.5
27	3.8	18	515	41	16	50	32	35	4.7	4.7	2.4	1.9
28	15	56	580	34	16	53	30	38	8.9	4.6	1.8	1.2
29	13	49	285	32	---	43	30	36	23	4.6	1.8	2.7
30	9.6	24	160	50	---	38	38	29	26	4.7	2.7	2.4
31	21	---	116	53	---	38	---	28	---	4.9	2.0	---
TOTAL	180.2	368.8	3620	1277	1604	1278	4099	3628	441.7	331.2	115.8	72.6
MEAN	5.81	12.3	117	41.2	57.3	41.2	137	117	14.7	10.7	3.74	2.42
MAX	21	56	580	91	323	227	495	676	35	60	14	3.5
MIN	1.6	2.3	12	15	16	16	30	28	4.1	3.2	1.3	1.2
CFSM	.07	.16	1.49	.52	.73	.52	1.74	1.49	.19	.14	.05	.03
IN.	.09	.17	1.71	.60	.76	.60	1.94	1.71	.21	.16	.05	.03

CAL YR 1982 TOTAL 34403.9 MEAN 94.3 MAX 1530 MIN 1.0 CFSM 1.20 IN 16.24
WTR YR 1983 TOTAL 17016.3 MEAN 46.6 MAX 676 MIN 1.2 CFSM .59 IN 8.03

03362000 YOUNGS CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°25'08", long 86°00'18", in SE¼SW¼ sec.5, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank on upstream side of county highway bridge, 0.5 mile southwest of Amity, 2.0 miles upstream from mouth, and 5 miles northwest of Edinburgh.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 1335: 1944. WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.20 ft National Geodetic Vertical Datum of 1929. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--41 years, 106 ft^3/s, 13.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft^3/s Jan. 27, 1952, gage height, 13.4 ft; minimum daily, 0.5 ft^3/s Sept. 29, Oct. 20, 21, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 2	1300	*1910	*8.19

Minimum daily discharge, 2.8 ft^3/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.6	15	156	60	29	52	935	38	80	7.3	5.9
2	3.5	5.9	16	129	200	28	187	1690	34	39	5.8	4.8
3	3.8	12	41	109	330	27	334	1410	84	24	5.4	4.3
4	3.0	10	179	93	177	26	201	604	142	27	5.1	3.8
5	3.1	8.0	143	84	121	26	150	331	83	82	5.0	3.5
6	2.9	6.5	131	74	105	54	203	222	65	41	4.6	3.3
7	3.5	5.9	78	70	91	84	363	173	54	25	4.4	4.1
8	4.9	5.1	50	58	69	65	333	174	43	19	4.1	3.8
9	5.5	5.2	37	54	66	51	691	130	38	16	4.2	3.5
10	5.4	5.1	29	56	65	43	613	111	35	14	4.0	3.1
11	4.4	9.3	28	53	65	38	404	99	32	13	4.7	3.1
12	4.9	15	23	44	60	35	279	90	30	13	5.3	3.3
13	4.7	12	18	37	54	33	241	89	28	11	4.2	3.5
14	5.4	8.8	17	37	56	33	916	97	26	9.7	3.9	3.5
15	5.0	7.2	19	37	53	31	492	184	25	9.2	3.6	3.2
16	4.5	6.3	77	32	51	28	288	143	24	8.5	3.9	3.5
17	4.0	5.9	77	29	48	28	216	108	22	11	4.7	3.3
18	3.6	5.5	56	25	43	32	167	91	20	13	6.9	2.8
19	4.2	5.5	52	22	43	36	132	87	44	9.2	5.0	3.1
20	4.2	6.3	48	20	40	34	108	78	51	9.9	4.1	3.5
21	5.1	8.8	38	25	37	197	93	67	37	8.5	3.8	4.1
22	5.4	10	32	150	37	150	83	128	27	8.0	3.5	4.4
23	5.4	11	30	110	39	101	77	121	23	6.6	6.3	4.5
24	4.7	19	33	80	37	85	70	84	20	6.3	14	4.1
25	4.6	14	475	70	34	70	60	71	18	5.7	12	3.7
26	4.9	10	832	60	29	60	57	64	16	5.7	6.6	3.9
27	4.6	12	670	53	27	67	55	54	15	5.4	6.9	4.2
28	4.6	34	763	48	28	72	52	55	16	5.5	62	3.8
29	5.0	46	358	45	---	54	45	55	16	5.7	29	3.5
30	5.4	21	269	56	---	48	92	46	33	6.6	12	3.5
31	5.6	---	200	70	---	49	---	41	---	11	7.3	---
TOTAL	139.7	336.9	4834	1986	2065	1714	7054	7632	1139	549.5	259.6	112.6
MEAN	4.51	11.2	156	64.1	73.8	55.3	235	246	38.0	17.7	8.37	3.75
MAX	5.6	46	832	156	330	197	916	1690	142	82	62	5.9
MIN	2.9	5.1	15	20	27	26	45	41	15	5.4	3.5	2.8
CFSM	.04	.11	1.46	.60	.69	.52	2.20	2.30	.36	.17	.08	.04
IN.	.05	.12	1.68	.69	.72	.60	2.45	2.65	.40	.19	.09	.04

CAL YR 1982 TOTAL 43775.8 MEAN 120 MAX 3120 MIN 2.9 CFSM 1.12 IN 15.22
WTR YR 1983 TOTAL 27822.3 MEAN 76.2 MAX 1690 MIN 2.8 CFSM .71 IN 9.67

03362500 SUGAR CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°21'39", long 85°59'51", in SW¼SE¼ sec.29, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank 50 ft upstream from highway bridge in Camp Atterbury, 1.3 miles upstream from confluence with Blue River, 1.5 miles northwest of Edinburgh, and at mile 1.3.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.23 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--41 years, 487 ft³/s, 13.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft³/s May 29, 1956, gage height, 18.38 ft; minimum daily, 9.2 ft³/s Sept. 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	1300	*4740	*10.70

Minimum daily discharge, 22 ft³/s Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	35	187	698	303	156	266	1840	233	257	59	40
2	32	37	156	573	730	152	403	3500	218	195	55	36
3	33	43	162	482	1450	149	1140	4580	206	152	51	33
4	30	49	343	403	992	149	1030	4190	380	136	48	32
5	32	54	457	361	652	149	778	2810	325	266	48	30
6	32	44	503	325	509	180	724	1620	253	266	48	29
7	32	39	408	303	442	249	975	1150	221	183	46	30
8	32	37	307	278	361	253	1300	1010	202	146	43	29
9	37	39	241	257	316	233	1640	897	169	120	40	28
10	41	39	202	249	299	206	2360	714	159	105	37	27
11	41	40	176	245	290	191	1680	602	152	97	42	27
12	40	56	166	229	286	176	1260	530	142	92	46	27
13	36	56	149	210	262	166	1020	488	136	84	69	26
14	35	66	136	195	249	162	2160	457	126	82	53	25
15	33	52	136	191	249	159	2390	573	123	77	43	24
16	32	45	183	180	241	152	1490	708	120	75	40	24
17	35	40	312	169	233	141	1080	558	114	75	39	24
18	36	38	307	160	221	152	839	447	111	80	46	24
19	35	38	274	150	214	173	682	394	166	77	45	22
20	40	43	257	140	210	176	577	375	169	73	43	22
21	37	49	237	162	202	503	493	343	152	73	37	25
22	35	55	221	214	195	851	432	334	132	80	34	25
23	36	60	198	334	191	607	389	587	120	67	36	25
24	35	89	195	375	191	447	361	597	108	63	46	26
25	34	136	672	356	180	370	320	452	105	59	46	26
26	34	111	2250	316	169	312	286	370	100	55	40	25
27	36	114	1860	282	159	303	270	329	92	53	42	26
28	34	146	2750	249	156	325	257	290	89	55	100	26
29	31	214	2020	233	---	307	253	290	108	55	82	26
30	31	202	1340	241	---	274	270	278	132	65	55	24
31	35	---	914	299	---	266	---	249	---	61	43	---
TOTAL	1072	2066	17719	8859	9952	8089	27125	31562	4863	3324	1502	813
MEAN	34.6	68.9	572	286	355	261	904	1018	162	107	48.5	27.1
MAX	41	214	2750	698	1450	851	2390	4580	380	266	100	40
MIN	30	35	136	140	156	141	253	249	89	53	34	22
CFSM	.07	.15	1.21	.60	.75	.55	1.91	2.15	.34	.23	.10	.06
IN.	.08	.16	1.39	.70	.78	.63	2.13	2.48	.38	.26	.12	.06

CAL YR 1982 TOTAL 199519 MEAN 547 MAX 7200 MIN 25 CFSM 1.15 IN 15.66
WTR YR 1983 TOTAL 116946 MEAN 320 MAX 4580 MIN 22 CFSM .68 IN 9.18

03363000 DRIFTWOOD RIVER NEAR EDINBURGH, IN

LOCATION.--Lat 39°20'21", long 85°59'11", in NW¼SW¼ sec.4, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120204, on left bank just downstream side of highway bridge, 0.8 mile downstream from confluence of Big Blue River and Sugar Creek, 1.5 miles southwest of Edinburgh, and at mile 14.1.

DRAINAGE AREA.--1,060 mi².

PERIOD OF RECORD.--October 1940 to current year. Prior to July 1941 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 636.99 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--43 years, 1,144 ft³/s, 14.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s Mar. 6, 1963, gage height, 16.97 ft; minimum daily, 38 ft³/s Sept. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.3 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 3	1200	*8730	*12.30

Minimum daily discharge, 104 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	145	458	1820	666	414	563	3640	621	968	212	149
2	137	148	376	1420	1140	412	688	6360	582	950	201	141
3	136	151	376	1180	2500	407	1690	8430	640	616	190	137
4	136	166	572	1000	2090	402	1880	7840	811	502	185	134
5	136	172	883	896	1540	402	1500	5480	696	665	185	130
6	134	157	1030	826	1150	434	1340	3540	611	844	184	125
7	134	151	991	773	984	511	1750	2710	572	568	181	127
8	139	148	769	715	857	530	2740	2860	544	453	174	123
9	154	148	616	658	762	505	3220	2560	516	397	168	123
10	157	148	525	633	712	474	4320	2000	484	364	164	119
11	151	151	475	621	685	448	3550	1630	466	335	165	117
12	151	169	449	592	659	426	2840	1410	449	319	189	116
13	154	172	414	552	616	411	2310	1280	436	304	230	113
14	160	201	389	523	593	406	3870	1210	414	281	191	110
15	166	178	384	511	588	402	5210	1560	406	275	175	107
16	166	169	440	491	575	391	4270	1510	397	261	166	107
17	163	163	711	472	562	382	2920	1210	384	260	165	105
18	166	160	732	451	542	390	2260	1040	376	260	173	106
19	166	160	655	406	523	411	1810	973	410	255	170	104
20	172	166	616	406	519	421	1490	928	449	257	165	106
21	169	188	601	442	499	719	1280	866	444	295	158	107
22	169	211	549	517	486	1560	1130	911	389	268	151	106
23	169	238	507	664	482	1190	1030	1250	364	240	151	111
24	169	238	493	764	479	898	963	1150	339	227	161	110
25	166	304	1040	770	464	763	892	933	327	227	158	109
26	163	262	3530	711	443	661	829	855	315	229	149	108
27	163	252	3640	644	422	626	772	785	304	213	149	107
28	160	304	5020	593	414	652	747	742	308	207	209	107
29	154	431	4960	560	---	642	772	727	406	199	198	107
30	145	553	3640	558	---	589	791	686	553	222	171	105
31	145	---	2460	625	---	565	---	645	---	207	158	---
TOTAL	4789	6204	38301	21794	21952	17444	59427	67721	14013	11668	5446	3476
MEAN	154	207	1236	703	784	563	1981	2185	467	376	176	116
MAX	172	553	5020	1820	2500	1560	5210	8430	811	968	230	149
MIN	134	145	376	406	414	382	563	645	304	199	149	104
CFSM	.15	.20	1.17	.66	.74	.53	1.87	2.06	.44	.36	.17	.11
IN.	.17	.22	1.34	.76	.77	.61	2.09	2.38	.49	.41	.19	.12

CAL YR 1982 TOTAL 491497 MEAN 1347 MAX 14700 MIN 134 CFSM 1.27 IN 17.25
WTR YR 1983 TOTAL 272235 MEAN 746 MAX 8430 MIN 104 CFSM .70 IN 9.55

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft downstream from highway bridge, 0.8 mile southwest of St. Paul, 1.5 miles downstream from Mill Creek, and at mile 34.4.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 21, 1938, nonrecording gage at site 500 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--53 years, 318 ft³/s, 14.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft³/s Jan. 5, 1949, gage height, 10.60 ft; maximum recorded gage height, 12.37 ft May 24, 1968; minimum daily discharge, 0.6 ft³/s Aug. 7, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	0900	*12,000	*10.12
May 3	0600	8,090	8.05

Minimum daily discharge, 2.9 ft³/s Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	167	562	282	118	128	7540	175	331	127	12
2	14	21	134	455	621	114	160	5070	167	224	72	9.5
3	12	23	160	381	986	111	292	6620	308	153	37	7.7
4	12	23	292	313	768	105	352	2780	329	303	28	7.8
5	11	23	335	277	507	105	302	1630	203	432	25	7.8
6	11	21	324	252	405	128	302	1020	171	178	23	7.8
7	11	20	252	234	352	134	703	775	152	123	22	6.8
8	12	19	199	212	282	124	1140	1010	131	100	20	8.0
9	17	19	163	191	248	114	1180	836	114	88	17	7.1
10	14	21	138	191	234	108	1160	588	101	81	16	7.4
11	15	26	131	187	225	105	1020	455	91	77	18	7.9
12	15	34	114	171	207	99	813	369	81	70	127	5.3
13	14	36	99	152	187	96	724	318	74	64	53	5.9
14	14	30	88	145	187	96	1830	308	66	57	31	5.9
15	15	26	102	145	187	96	1930	488	62	54	23	4.5
16	14	23	297	134	179	88	1700	462	58	53	20	3.9
17	13	21	411	131	183	85	1010	313	54	45	19	3.6
18	14	21	302	120	175	96	739	252	50	43	19	2.9
19	14	20	252	110	171	99	581	238	50	47	19	2.9
20	15	27	225	100	167	99	468	225	129	70	17	4.0
21	16	56	207	140	152	183	387	207	111	46	15	9.2
22	16	93	175	267	149	297	329	352	68	39	13	11
23	16	88	163	455	152	220	297	429	55	33	12	11
24	16	102	152	417	145	179	277	287	49	30	13	7.2
25	15	105	346	346	138	160	248	243	44	27	12	6.1
26	15	85	978	277	124	141	220	225	40	27	11	6.6
27	15	74	1450	234	118	141	207	195	37	26	12	6.0
28	15	111	1790	207	114	149	212	195	44	24	26	5.6
29	15	262	1670	191	---	134	212	195	1130	21	20	6.0
30	15	243	1270	207	---	124	689	187	482	21	20	6.1
31	16	---	746	282	---	118	---	179	---	22	14	---
TOTAL	442	1691	13132	7486	7645	3966	19612	33991	4626	2909	901	203.5
MEAN	14.3	56.4	424	241	273	128	654	1096	154	93.8	29.1	6.78
MAX	17	262	1790	562	986	297	1930	7540	1130	432	127	12
MIN	11	18	88	100	114	85	128	179	37	21	11	2.9
CFSM	.05	.19	1.40	.80	.90	.42	2.16	3.62	.51	.31	.10	.02
IN.	.05	.21	1.61	.92	.94	.49	2.41	4.17	.57	.36	.11	.02

CAL YR 1982 TOTAL 144380.0 MEAN 396 MAX 6830 MIN 11 CFSM 1.31 IN 17.73
WTR YR 1983 TOTAL 96604.5 MEAN 265 MAX 7540 MIN 2.9 CFSM .88 IN 11.86

03363900 FLATROCK RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°14'06", long 85°55'36", in NE¼SW¼ sec.12, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at downstream side of bridge on U.S. Highway 31 (bypass), 0.2 mile northwest of Columbus city limits, and 2.6 miles upstream from mouth.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, 592 ft³/s, 15.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s May 25, 1968, gage height, 15.87 ft; minimum daily, 22 ft³/s Oct. 5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 15	0700	3,530	9.14	May 4	0200	11,800	13.67
May 2	0700	*12,700	*13.96				

Minimum daily discharge, 33 ft³/s Sept. 13-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	43	259	998	471	255	240	3360	315	535	77	45
2	45	44	211	822	644	254	263	10300	298	395	110	43
3	44	44	193	702	1330	248	369	9950	303	285	102	42
4	44	45	268	608	1220	241	492	8520	638	231	84	40
5	43	45	388	541	900	237	485	3580	451	436	76	38
6	43	45	429	494	733	248	466	2030	360	331	73	39
7	43	45	398	468	641	275	724	1420	320	224	69	38
8	42	44	313	430	558	272	1240	1640	289	186	67	35
9	43	44	251	401	494	256	1660	1510	268	166	64	35
10	42	44	217	385	465	244	1730	1170	250	154	62	34
11	42	45	201	374	446	235	1560	952	236	147	60	34
12	44	49	182	356	428	227	1290	822	225	138	61	34
13	42	55	165	335	402	217	1100	742	217	130	91	33
14	42	59	150	313	383	211	1870	683	208	124	78	33
15	42	59	147	305	380	210	3200	962	201	119	65	33
16	42	56	187	293	373	206	2490	1110	195	113	59	33
17	41	53	415	276	366	197	1750	859	189	111	54	33
18	41	50	450	254	357	201	1280	700	185	111	52	33
19	41	49	378	217	343	208	1040	626	181	104	51	33
20	42	50	343	205	337	211	876	580	203	103	50	34
21	42	60	304	253	323	246	751	525	259	124	49	34
22	42	84	285	303	310	424	664	528	216	104	48	34
23	43	111	259	573	310	433	604	655	186	93	48	34
24	42	120	244	681	309	361	561	570	172	89	48	34
25	42	122	280	622	299	321	513	486	164	84	47	35
26	42	133	1110	538	284	296	468	446	157	82	46	36
27	43	120	1560	471	266	283	436	411	150	79	46	35
28	42	115	2440	423	258	287	415	387	149	78	52	35
29	42	163	2470	394	---	278	405	378	609	76	52	35
30	43	287	2010	383	---	254	421	360	822	76	52	35
31	43	---	1360	415	---	240	---	336	---	75	48	---
TOTAL	1319	2283	17867	13833	13630	8076	29363	56604	8417	5103	1941	1069
MEAN	42.5	76.1	576	446	487	261	979	1826	281	165	62.6	35.6
MAX	45	287	2470	998	1330	433	3200	10300	822	535	110	45
MIN	41	43	147	205	258	197	240	336	149	75	46	33
CFSM	.08	.14	1.08	.84	.91	.49	1.83	3.42	.53	.31	.12	.07
IN.	.09	.16	1.24	.96	.95	.56	2.05	3.94	.59	.36	.14	.07

CAL YR 1982 TOTAL 229282 MEAN 628 MAX 13100 MIN 41 CFSM 1.18 IN 15.97
WTR YR 1983 TOTAL 159505 MEAN 437 MAX 10300 MIN 33 CFSM .82 IN 11.11

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE¼NW¼ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mile downstream from confluence of Driftwood River and Flatrock River, 1.3 miles upstream from Haw Creek, and at mile 238.7.

DRAINAGE AREA.--1,707 mi^2.

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder above concrete control. Datum of gage is 603.12 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1952, nonrecording gage 600 ft upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--36 years, 1,833 ft^3/s, 14.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.---Maximum discharge, 52,300 ft^3/s Mar. 6, 1963, gage height, 16.23 ft; minimum daily, 87 ft^3/s Sept. 29, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 4	0100	*21500	*10.13

Minimum daily discharge, 140 ft^3/s Sept. 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	247	829	2840	1140	655	858	7350	985	1300	315	234
2	209	250	706	2260	1790	654	1140	16500	943	1430	363	224
3	207	258	788	1900	3780	650	2000	19700	986	986	353	217
4	205	265	1080	1630	3590	636	2360	18700	1670	810	308	210
5	201	292	1370	1440	2480	630	2070	10600	1310	998	292	203
6	201	281	1530	1330	1910	723	1940	5530	1080	1220	280	207
7	209	263	1470	1230	1650	871	2610	4200	982	883	273	219
8	216	255	1190	1150	1430	894	4010	4580	911	715	259	191
9	237	250	972	1060	1270	832	5040	4170	844	616	244	169
10	254	251	843	1020	1190	771	5590	2630	785	558	229	169
11	241	264	760	994	1140	725	5100	2660	738	522	228	164
12	245	300	703	953	1090	687	4230	2260	702	498	234	164
13	242	317	649	894	1030	656	3550	2100	670	478	367	159
14	252	330	597	841	973	638	5850	2060	641	462	365	154
15	261	338	606	814	964	627	8000	3160	613	444	313	149
16	262	310	814	787	947	613	6510	3040	597	429	279	145
17	259	295	1120	747	923	594	4760	2300	575	421	266	140
18	275	284	1250	710	900	610	3640	1870	558	429	272	140
19	294	279	1110	628	865	641	2900	1690	558	412	266	140
20	303	295	1010	612	849	666	2400	1570	631	412	261	145
21	302	349	965	701	823	993	2050	1450	725	457	248	159
22	292	430	899	977	795	1870	1810	1500	637	435	242	145
23	285	450	833	1370	786	1710	1650	1860	560	399	234	145
24	283	460	806	1510	779	1350	1530	1780	519	376	242	154
25	277	501	1910	1430	756	1150	1400	1490	501	355	243	154
26	274	499	4720	1290	724	1030	1290	1340	480	367	230	159
27	272	480	5290	1160	686	973	1200	1240	464	337	229	154
28	270	544	6510	1050	666	1010	1150	1170	480	321	303	154
29	263	674	6900	977	---	990	1150	1160	892	309	322	149
30	250	916	5460	965	---	915	1490	1100	1400	321	285	149
31	240	---	3910	1020	---	865	---	1030	---	337	255	---
TOTAL	7804	10927	57600	36290	35926	26629	89278	131790	23437	18037	8600	5065
MEAN	252	364	1858	1171	1283	859	2976	4251	781	582	277	169
MAX	303	916	6900	2840	3780	1870	8000	19700	1670	1430	367	234
MIN	201	247	597	612	666	594	858	1030	464	309	228	140
CFSM	.15	.21	1.09	.69	.75	.50	1.74	2.49	.46	.34	.16	.10
IN.	.17	.24	1.26	.79	.78	.58	1.95	2.87	.51	.39	.19	.11

CAL YR 1982 TOTAL 724051 MEAN 1984 MAX 26900 MIN 201 CFSM 1.16 IN 15.78
WTR YR 1983 TOTAL 451383 MEAN 1237 MAX 19700 MIN 140 CFSM .73 IN 9.84

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft downstream from bridge on County Road 450 North, 1.2 miles southeast of Clifford, 5.8 miles northeast of Columbus, and 7.6 miles upstream from mouth.

DRAINAGE AREA.--47.5 mi².

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 643.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--16 years, 49.8 ft³/s, 14.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft³/s May 24, 1968, gage height, 13.9 ft, from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1200 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	1100	1300	10.10	May 3	0700	*1960	*12.40
May 2	0800	1570	11.12				

Minimum daily discharge, 0.80 ft³/s Sept. 11-19, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.5	13	71	33	14	13	885	24	14	2.1	1.7
2	1.4	2.7	11	59	170	13	22	1110	22	11	1.9	1.5
3	1.5	3.1	41	49	122	13	40	1220	27	10	1.8	1.3
4	1.6	3.1	113	43	69	13	29	275	44	11	1.8	1.1
5	1.6	2.9	83	37	43	13	26	171	29	15	5.8	1.1
6	1.5	2.7	77	33	40	17	40	123	26	11	9.7	1.2
7	1.6	2.7	45	30	34	19	209	111	23	9.4	2.7	1.0
8	1.7	2.5	31	26	27	17	263	188	21	8.1	2.7	1.0
9	1.8	2.4	24	24	26	15	299	115	20	7.4	2.5	.96
10	1.8	2.4	20	24	24	14	190	91	18	6.8	2.1	.87
11	1.8	2.5	18	21	24	13	140	76	17	6.2	2.1	.80
12	1.8	6.3	16	19	21	12	99	66	16	5.4	1.8	.80
13	1.9	5.7	13	17	21	11	105	65	15	4.6	1.5	.80
14	2.1	3.7	13	17	20	11	783	90	14	4.1	1.5	.80
15	1.9	3.3	15	16	19	10	227	302	13	3.5	1.5	.80
16	1.9	2.9	96	15	19	10	128	177	12	3.2	1.5	.80
17	1.8	2.5	64	15	19	10	93	106	11	3.2	1.5	.80
18	1.8	2.4	45	14	18	12	73	82	10	4.4	1.6	.80
19	1.8	2.4	37	13	17	12	59	70	20	3.9	1.7	.80
20	1.9	2.7	31	12	17	12	50	58	15	3.7	1.7	.87
21	1.8	14	24	14	16	34	43	52	13	3.3	1.5	1.0
22	1.8	35	21	127	16	25	38	57	11	2.8	1.4	1.0
23	1.8	15	20	103	16	18	36	50	10	2.7	1.8	1.0
24	2.1	13	20	81	16	16	33	41	9.0	2.5	2.1	1.0
25	1.9	8.9	235	60	15	15	28	39	8.2	2.4	1.5	1.0
26	2.1	7.3	279	47	14	14	25	36	7.6	2.2	1.3	1.0
27	2.2	7.5	429	38	13	15	24	32	7.0	2.2	1.1	1.0
28	2.2	30	441	32	13	15	24	33	10	2.1	10	.95
29	2.2	38	178	30	---	13	24	33	25	2.0	6.1	.86
30	2.2	18	112	33	---	12	87	29	20	2.0	2.9	.80
31	2.4	---	85	33	---	13	---	26	---	2.1	2.0	---
TOTAL	57.4	248.1	2651	1153	907	451	3250	5809	517.8	172.2	81.2	29.41
MEAN	1.85	8.27	85.5	37.2	32.4	14.5	108	187	17.3	5.55	2.62	.98
MAX	2.4	38	441	127	170	34	783	1220	44	15	10	1.7
MIN	1.4	2.4	11	12	13	10	13	26	7.0	2.0	1.1	.80
CFSM	.04	.17	1.80	.78	.68	.31	2.27	3.94	.36	.12	.06	.02
IN.	.04	.19	2.08	.90	.71	.35	2.55	4.55	.41	.13	.06	.02

CAL YR 1982 TOTAL 19646.80 MEAN 53.8 MAX 2140 MIN 1.4 CFSM 1.13 IN 15.39
WTR YR 1983 TOTAL 15327.11 MEAN 42.0 MAX 1220 MIN .80 CFSM .88 IN 12.00

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼NW¼ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of county highway bridge, 0.2 mile north of Hartsville, 5.9 miles upstream from Duck Creek, and at mile 20.0.

DRAINAGE AREA.--91.4 mi^2.

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those below 10 ft^3/s, which are poor.

AVERAGE DISCHARGE.--35 years, 96.1 ft^3/s, 14.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s Jan. 21, 1959, gage height, 14.29 ft; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft National Geodetic Vertical Datum of 1929, from floodmarks, upstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 1	1500	*4140	*9.28	May 3	1500	3220	8.16
May 2	1700	3930	9.04				

No flow Oct. 2-12, Aug. 14-17, and Sept. 17-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.41	29	128	100	26	20	2530	40	31	.91	1.3
2	.00	.62	17	107	260	25	32	2560	37	24	.92	1.0
3	.00	.80	24	87	266	23	70	2630	48	14	.76	.79
4	.00	.80	71	71	172	22	61	556	207	16	.55	.64
5	.00	.94	80	64	123	22	51	299	104	197	.48	.49
6	.00	1.0	80	60	107	29	52	217	73	80	.38	.41
7	.00	1.2	51	54	90	34	129	185	59	31	.26	.38
8	.00	1.2	33	47	68	29	219	233	47	17	.16	.28
9	.00	1.2	25	41	62	26	359	172	39	11	.08	.25
10	.00	1.2	21	42	60	24	256	123	34	8.3	.02	.18
11	.00	1.4	19	41	58	22	209	113	30	6.7	.02	.12
12	.00	2.9	16	37	53	20	168	87	27	5.3	.02	.24
13	.01	4.4	11	30	46	19	163	89	25	4.3	.02	.22
14	.02	6.0	12	30	46	19	700	110	23	3.5	.00	.11
15	.02	4.4	16	30	46	19	411	247	22	3.2	.00	.03
16	.02	4.7	130	26	44	17	242	185	20	35	.00	.01
17	.02	5.0	128	26	42	16	187	131	18	15	.00	.00
18	.02	3.8	87	19	39	18	147	106	16	6.7	.27	.00
19	.01	3.4	68	18	39	19	108	98	15	5.9	.70	.00
20	.01	3.8	60	19	38	20	97	86	14	24	.73	.00
21	.02	13	49	26	34	44	58	72	20	28	.41	.00
22	.01	37	41	116	34	62	65	143	14	8.4	.24	.00
23	.01	41	39	205	35	38	60	114	11	4.2	.49	.00
24	.01	21	38	149	34	29	58	82	9.0	2.9	.94	.00
25	.01	14	121	111	31	27	48	72	7.8	2.3	.46	.00
26	.01	12	348	90	26	24	41	66	6.8	1.7	.29	.00
27	.02	8.9	594	71	24	25	38	57	6.1	1.4	.25	.00
28	.02	19	607	62	25	27	41	56	7.7	1.2	59	.00
29	.10	80	312	54	---	22	42	57	42	1.0	4.6	.00
30	.19	42	210	68	---	18	137	51	83	.97	2.7	.00
31	.24	---	160	111	---	18	---	44	---	.90	1.7	---
TOTAL	.78	337.07	3497	2040	2002	783	4269	11571	1105.4	591.87	77.36	6.45
MEAN	.025	11.2	113	65.8	71.5	25.3	142	373	36.8	19.1	2.50	.22
MAX	.24	80	607	205	266	62	700	2630	207	197	59	1.3
MIN	.00	.41	11	18	24	16	20	44	6.1	.90	.00	.00
CFSM	.000	.12	1.24	.72	.78	.28	1.55	4.08	.40	.21	.03	.002
IN.	.00	.14	1.42	.83	.81	.32	1.74	4.71	.45	.24	.03	.00

CAL YR 1982 TOTAL 37468.61 MEAN 103 MAX 3800 MIN .00 CFSM 1.13 IN 15.25
WTR YR 1983 TOTAL 26280.93 MEAN 72.0 MAX 2630 MIN .00 CFSM .79 IN 10.70

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in NW¼NE¼ sec.5, T.7 N., R.8 E., Jennings County, Hydrologic Unit 05120206, on left bank at downstream side of county highway bridge, 2.5 miles west of Brewersville, 5.7 miles upstream from Wyaloosing Creek, and 16.0 miles upstream from mouth.

DRAINAGE AREA.--155 mi².

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 629.13 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1952, nonrecording gage at site 1.7 miles upstream at datum approximately 8 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 172 ft³/s, 15.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft³/s Jan. 21, 1959, gage height, 21.70 ft inside, 22.20 ft outside, from rating curve extended above 6,500 ft³/s on basis of contracted-opening measurement of peak flow; no flow at times during 1948, 1949, 1953-55, 1964, 1965, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 27	1400	3850	10.39	May 2	1000	4920	11.75
May 1	1400	4700	11.50	May 3	1100	*5450	*12.36

Minimum daily discharge, 0.44 ft³/s Sept. 19, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	2.1	69	156	144	42	46	2900	55	20	2.5	12
2	4.5	3.5	60	131	790	41	72	3620	50	20	2.4	5.8
3	4.8	8.4	54	114	463	39	154	3970	84	15	2.8	4.1
4	4.3	19	110	95	230	37	120	995	145	14	3.1	3.1
5	4.3	14	182	84	152	35	96	439	92	21	2.3	2.4
6	4.2	7.9	185	79	143	60	100	278	65	40	1.8	2.1
7	6.2	5.4	104	74	124	92	168	221	55	23	1.6	1.7
8	4.3	4.5	68	67	101	73	1160	552	48	15	1.3	1.4
9	9.5	3.9	54	60	97	60	921	261	42	12	1.7	1.3
10	19	3.5	46	61	96	52	473	186	37	9.9	1.8	1.2
11	16	3.8	43	62	96	48	324	151	33	8.8	1.5	1.0
12	8.9	7.3	41	55	89	44	232	132	30	7.8	1.3	.95
13	5.8	10	30	47	78	42	263	124	28	7.0	.75	.99
14	4.4	20	30	44	78	40	1360	462	26	6.4	.95	.81
15	3.9	14	136	44	79	39	641	1720	24	6.0	4.3	.65
16	2.7	8.9	607	40	78	36	312	728	22	5.4	2.9	.48
17	1.9	6.9	233	36	76	35	223	296	50	5.0	1.9	.52
18	2.2	5.7	151	32	70	36	176	203	30	5.0	1.7	.48
19	3.6	8.0	163	30	65	41	147	170	22	5.0	1.3	.44
20	5.6	12	162	29	64	41	125	148	20	6.8	1.2	.58
21	5.5	116	105	51	59	116	109	124	19	32	.93	.95
22	4.0	303	79	665	56	124	98	283	18	17	.93	.75
23	3.4	127	77	428	56	83	90	203	16	11	1.2	.49
24	3.1	103	115	262	55	68	86	129	14	7.3	48	3.3
25	2.8	58	593	181	51	61	78	102	13	5.5	22	2.1
26	2.6	40	860	142	46	54	70	93	12	4.3	8.4	1.2
27	2.4	49	2200	118	42	54	66	80	12	3.4	4.6	.71
28	2.2	283	1230	101	41	59	66	73	14	2.7	195	.46
29	2.0	247	477	92	---	55	69	79	27	2.5	79	.44
30	2.4	113	265	159	---	47	392	77	19	2.4	25	.96
31	2.5	---	192	180	---	44	---	63	---	2.4	14	---
TOTAL	153.9	1607.8	8721	3719	3519	1698	8237	18862	1122	343.6	438.16	53.36
MEAN	4.96	53.6	281	120	126	54.8	275	608	37.4	11.1	14.1	1.78
MAX	19	303	2200	665	790	124	1360	3970	145	40	195	12
MIN	1.9	2.1	30	29	41	35	46	63	12	2.4	.75	.44
CFSM	.03	.35	1.81	.77	.81	.35	1.77	3.92	.24	.07	.09	.01
IN.	.04	.39	2.09	.89	.84	.41	1.98	4.53	.27	.08	.11	.01

CAL YR 1982 TOTAL 71091.40 MEAN 195 MAX 6140 MIN 1.9 CFSM 1.26 IN 17.06
WTR YR 1983 TOTAL 48474.82 MEAN 133 MAX 3970 MIN .44 CFSM .86 IN 11.63

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft downstream from highway bridge, 1 mile north of Seymour, 9.5 miles downstream from Sand Creek, and at mile 214.6.

DRAINAGE AREA.--2,341 mi².

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27 published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32. WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft upstream at datum 7.61 ft higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft downstream at present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--56 years, 2,441 ft³/s, 14.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,500 ft³/s Jan. 5, 1949, gage height, 19.67 ft; minimum daily, 86 ft³/s Sept. 28, 30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft, from information by Corps of Engineers and Indiana Department of Highways, discharge, 120,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 28	0800	13100	14.13	May 3	2300	*39800	*17.94
Apr. 15	1100	13900	14.37				

Minimum daily discharge, 190 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	283	1350	4580	1740	1040	1210	7060	1590	1310	429	302
2	287	283	1190	3550	2750	1030	1350	27600	1510	1490	410	275
3	281	287	1140	2970	4930	1020	2140	36700	1490	1310	447	260
4	277	287	1620	2570	5210	1000	2920	35300	1910	1080	423	248
5	274	304	1940	2260	3990	976	2870	23900	2170	1000	404	243
6	269	326	2380	2050	3030	1010	2630	13400	1750	1360	393	237
7	272	308	2110	1910	2580	1190	3210	8370	1560	1260	388	244
8	276	295	1810	1770	2270	1280	5080	7470	1450	1040	380	238
9	299	283	1510	1650	2010	1220	8620	7530	1360	910	368	231
10	305	286	1320	1560	1860	1140	9140	5730	1270	833	344	228
11	303	285	1200	1520	1780	1080	8510	4390	1210	779	329	230
12	307	314	1110	1470	1710	1030	6890	3730	1160	741	323	229
13	305	338	1040	1390	1620	990	5230	3390	1110	703	331	219
14	300	337	964	1320	1530	962	7710	3270	1070	671	406	211
15	302	356	969	1270	1490	948	13300	6640	1030	644	373	210
16	305	361	2270	1220	1470	925	11600	8860	987	618	343	206
17	301	340	1990	1180	1430	902	9110	5230	960	601	326	200
18	300	325	1910	1130	1390	902	6170	3700	954	596	322	199
19	311	316	1740	1050	1350	920	4430	3170	909	581	319	197
20	325	323	1670	993	1310	943	3630	2880	908	588	314	201
21	328	437	1490	1020	1280	1180	3110	2610	981	563	305	211
22	324	1140	1370	2150	1240	1820	2730	2650	957	617	305	202
23	316	941	1280	3160	1220	2220	2470	3020	866	572	311	194
24	311	888	1280	2760	1200	1910	2280	2890	809	531	290	196
25	308	760	1750	2450	1180	1640	2110	2530	761	495	311	195
26	306	721	6290	2160	1130	1480	1940	2250	725	474	308	195
27	304	706	8100	1910	1090	1390	1800	2080	696	466	302	195
28	303	1040	12700	1710	1050	1380	1710	1930	676	446	332	195
29	299	1650	11800	1580	---	1370	1650	1870	678	431	535	192
30	294	1400	9840	1550	---	1320	2220	1800	1290	418	415	190
31	286	---	7250	1690	---	1240	---	1690	---	439	344	---
TOTAL	9275	15925	94383	59553	54840	37458	137770	243640	34797	23567	11130	6573
MEAN	299	531	3045	1921	1959	1208	4592	7859	1160	760	359	219
MAX	328	1650	12700	4580	5210	2220	13300	36700	2170	1490	535	302
MIN	269	283	964	993	1050	902	1210	1690	676	418	290	190
CFSM	.13	.23	1.30	.82	.84	.52	1.96	3.36	.50	.33	.15	.09
IN.	.15	.25	1.50	.95	.87	.60	2.19	3.87	.55	.37	.18	.10

CAL YR 1982 TOTAL 1092515 MEAN 2993 MAX 45000 MIN 269 CFSM 1.28 IN 17.36
WTR YR 1983 TOTAL 728911 MEAN 1997 MAX 36700 MIN 190 CFSM .85 IN 11.58

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile west of Smyrna, 3.7 miles upstream from Big Creek, and 4 miles northwest of Madison.

DRAINAGE AREA.--9.31 mi^2.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 1.0 ft^3/s, which are poor.

AVERAGE DISCHARGE.--15 years, 13.1 ft^3/s, 19.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft^3/s Apr. 2, 1970, gage height, 7.89 ft; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 8	1000	558	5.57	May 3	0600	*1060	*6.85
Apr. 30	1200	890	6.45	June 3	1800	519	5.45
May 1	1200	1010	6.73				

Minimum daily discharge, no flow July 31-Aug. 22, 26, Sept. 2-22, 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.59	.67	24	7.8	6.5	2.3	3.5	416	2.6	4.9	.00	.02
2	.59	.77	23	6.6	129	2.1	21	200	2.2	2.7	.00	.00
3	.52	1.3	13	5.5	29	2.1	19	487	139	1.8	.00	.00
4	.59	1.1	10	4.4	13	2.0	12	103	49	1.6	.00	.00
5	.52	.88	21	3.5	9.3	2.0	7.8	27	12	1.6	.00	.00
6	.52	.78	16	3.3	8.7	17	42	14	7.6	1.2	.00	.00
7	8.3	.75	8.9	3.0	8.8	11	76	12	5.9	.89	.00	.00
8	1.2	.68	6.7	2.5	7.7	7.7	248	26	4.2	.75	.00	.00
9	13	.66	5.4	2.3	8.1	6.0	79	11	2.9	.60	.00	.00
10	5.8	.67	4.8	2.3	10	4.8	39	7.7	2.4	.54	.00	.00
11	2.1	.65	5.1	2.2	9.1	3.9	31	6.2	1.9	.55	.00	.00
12	1.3	7.4	4.4	1.9	8.3	3.3	15	7.4	1.6	.41	.00	.00
13	1.6	4.5	3.5	1.8	6.8	2.9	38	15	1.3	.36	.00	.00
14	3.2	1.6	3.0	1.8	6.7	2.8	118	82	1.2	.33	.00	.00
15	1.5	1.1	122	1.8	9.2	2.6	29	258	1.2	.30	.00	.00
16	3.2	.89	85	1.5	8.5	2.3	14	47	1.1	.29	.00	.00
17	1.2	.80	22	1.4	6.8	2.2	9.9	15	.99	.24	.00	.00
18	.73	.73	13	1.3	5.5	3.6	7.9	10	.96	.21	.00	.00
19	.58	.66	28	1.2	5.2	5.2	6.5	23	1.4	.25	.00	.00
20	1.1	7.7	17	1.1	4.4	4.5	5.5	15	.97	.21	.00	.00
21	1.2	97	10	14	3.9	40	4.6	8.9	.74	.16	.00	.00
22	.75	43	7.9	160	3.6	12	3.9	46	.57	.10	.00	.00
23	.70	72	55	49	3.6	7.1	3.8	14	.52	.11	.06	.04
24	.66	32	48	24	3.4	5.4	5.1	7.8	.44	1.0	.12	.03
25	.61	12	132	14	2.9	4.4	4.3	6.1	.39	.19	.03	.00
26	.62	12	62	11	2.5	3.6	3.5	5.0	.35	.10	.00	.00
27	.61	33	212	8.7	2.2	5.7	3.2	3.7	.30	.06	.73	.00
28	.59	153	64	7.0	2.2	6.3	4.7	5.0	.36	.04	3.8	.00
29	.59	35	23	6.4	---	4.6	6.7	7.3	133	.03	.49	.00
30	.60	16	13	9.3	---	3.7	301	4.3	10	.02	.10	.00
31	.64	---	9.7	7.4	---	3.5	---	3.1	---	.00	.04	---
TOTAL	55.71	539.29	1072.4	368.0	324.9	186.6	1162.9	1893.5	387.09	21.54	5.37	.09
MEAN	1.80	18.0	34.6	11.9	11.6	6.02	38.8	61.1	12.9	.69	.17	.003
MAX	13	153	212	160	129	40	301	487	139	4.9	3.8	.04
MIN	.52	.65	3.0	1.1	2.2	2.0	3.2	3.1	.30	.00	.00	.00
CFSM	.19	1.93	3.72	1.28	1.25	.65	4.17	6.56	1.39	.07	.02	.000
IN.	.22	2.15	4.28	1.47	1.30	.75	4.65	7.57	1.55	.09	.02	.00

CAL YR 1982 TOTAL 7564.76 MEAN 20.7 MAX 568 MIN .22 CFSM 2.22 IN 30.22
WTR YR 1983 TOTAL 6017.39 MEAN 16.5 MAX 487 MIN .00 CFSM 1.77 IN 24.04

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN

LOCATION.--Lat 38°48'15", long 85°40'26", in SW¼NE¼ sec.7, T.4 N., R.8 E., Jefferson County, Hydrologic Unit 05120207, on left bank at downstream side of highway bridge, 1.4 miles northwest of Deputy, 1.9 miles upstream from Coffee Creek, 2.4 miles downstream from confluence of Graham Creek and Big Creek, and at mile 50.0.

DRAINAGE AREA.--293 mi².

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1335: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 540.00 ft National Geodetic Vertical Datum of 1929. Prior to June 22, 1955, nonrecording gage at same site. Prior to Aug. 25, 1983 at datum 1.17 ft higher.

REMARKS.--Records good except those below 20 ft³/s , which are poor.

AVERAGE DISCHARGE.--35 years (water years 1949 to current year), 348 ft³/s, 16.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,200 ft³/s Jan. 21, 1959, from rating curve extended above 25,000 ft³/s on basis of contracted-opening measurement of peak flow, gage height, 34.3 ft, present datum, from floodmarks; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s and maximum (*), at present datum:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 27	2200	9610	21.43	May 3	1100	15,800	24.58
Apr. 8	2100	9110	21.12	May 15	2100	9,980	21.65
May 1	1900	15200	24.33				

Minimum daily discharge, 0.57 ft³/s Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	10	498	352	217	57	103	9930	137	177	6.2	22
2	7.2	11	607	280	1270	55	151	7560	114	111	5.5	14
3	7.2	15	498	227	1420	52	481	13300	419	78	4.8	40
4	7.2	25	353	187	638	49	431	5740	1300	60	4.3	21
5	7.2	18	347	162	410	46	294	1210	549	52	3.8	12
6	7.2	15	552	150	300	87	408	679	271	43	3.4	7.6
7	7.6	13	382	138	278	265	947	476	186	35	9.0	5.1
8	35	12	237	122	240	217	4900	644	145	32	6.6	3.5
9	94	11	178	109	208	153	4010	545	122	30	4.7	2.4
10	211	10	148	103	234	120	1310	351	104	25	3.4	1.9
11	99	10	137	98	274	98	1000	268	89	23	2.4	1.5
12	60	20	126	89	274	84	685	219	77	23	2.1	1.3
13	44	73	108	80	213	74	624	234	68	22	1.8	1.1
14	30	49	94	74	178	68	2020	858	61	19	1.6	.84
15	25	33	473	70	183	63	1500	8600	54	17	1.4	.68
16	21	28	3130	64	204	57	663	4380	58	14	1.0	.61
17	16	26	979	60	189	52	451	890	50	11	.89	.59
18	14	22	546	51	155	61	341	523	45	15	.87	.57
19	12	21	528	48	132	71	272	420	42	23	.81	.57
20	12	27	777	43	114	74	221	479	89	57	.85	.58
21	14	750	464	82	102	341	184	337	59	224	.83	.70
22	13	1680	309	2060	93	515	159	641	40	101	.80	.74
23	13	1080	456	1740	90	270	144	952	33	51	1.3	.74
24	12	1240	1350	938	85	176	145	412	28	33	1.7	.68
25	11	564	1500	598	78	137	133	262	24	25	1.0	.62
26	11	322	4030	435	68	113	117	203	21	18	.90	.60
27	11	563	5210	325	62	111	105	167	18	13	.80	.59
28	10	1980	4660	247	59	126	101	149	17	11	3.7	.58
29	9.5	1800	1160	203	---	122	112	194	1140	10	59	.58
30	9.0	673	643	212	---	105	4910	169	466	8.6	53	.58
31	9.5	---	460	249	---	102	---	180	---	7.2	40	---
TOTAL	847.2	11101	30940	9596	7768	3921	26922	60972	5826	1368.8	228.45	144.25
MEAN	27.3	370	998	310	277	126	897	1967	194	44.2	7.37	4.81
MAX	211	1980	5210	2060	1420	515	4910	13300	1300	224	59	40
MIN	7.2	10	94	43	59	46	101	149	17	7.2	.80	.57
CFSM	.09	1.26	3.41	1.06	.95	.43	3.06	6.71	.66	.15	.03	.02
IN.	.11	1.41	3.93	1.22	.99	.50	3.42	7.74	.74	.17	.03	.02

CAL YR 1982 TOTAL 179051.10 MEAN 491 MAX 17000 MIN 7.2 CFSM 1.68 IN 22.73
WTR YR 1983 TOTAL 159634.70 MEAN 437 MAX 13300 MIN .57 CFSM 1.49 IN 20.27

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10" in NW¼NE¼ sec.11, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on right bank at downstream side of county road bridge, 1.5 miles northwest of Nebraska, 2.9 miles northeast of Butlerville, and 3.6 miles upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi².

PERIOD OF RECORD.--May 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.17 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair except those for period of no gage-height record, which are poor.

AVERAGE DISCHARGE.--28 years, 13.1 ft³/s, 15.61 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,360 ft³/s June 10, 1981, gage height, 12.99 ft, from rating curve extended above 550 ft³/s on basis of slope-area measurement of peak flow and a contracted-opening measurement at gage height, 10.20 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1745	960	7.35	May 2	0600	*1290	*8.27
Dec. 27	1000	1240	8.15	May 3	0530	1210	8.05
May 1	0845	1280	8.25	May 14	1745	1040	7.59

Minimum daily discharge, no flow Oct. 1-7, July 13-17, July 24 to August 6, 9-27, Sept. 4-30.

NOTE.--No gage-height record May 23 to June 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.12	6.9	6.4	7.0	2.2	2.9	365	3.5	.34	.00	1.5
2	.00	.13	17	5.5	98	2.1	12	419	3.0	.18	.00	.12
3	.00	.19	9.7	4.8	22	2.0	10	424	25	.13	.00	.01
4	.00	.23	8.6	4.0	10	1.9	7.0	62	15	.24	.00	.00
5	.00	.19	20	3.7	7.3	1.8	5.7	21	7.0	.49	.00	.00
6	.00	.17	11	3.7	7.0	9.9	9.6	13	5.0	.20	.00	.00
7	.00	.15	5.8	3.5	6.6	6.4	18	19	3.5	.11	.63	.00
8	.01	.15	4.4	3.0	5.3	4.6	167	39	2.8	.07	.02	.00
9	.44	.15	3.9	2.9	5.7	3.7	75	12	2.2	.05	.00	.00
10	.66	.15	3.5	3.0	6.6	3.4	26	8.7	1.8	.04	.00	.00
11	.25	.15	3.5	2.9	6.4	3.1	19	6.9	1.5	.03	.00	.00
12	.21	1.0	3.1	2.5	5.4	2.9	11	8.7	1.3	.02	.00	.00
13	.13	1.5	2.7	2.3	4.4	2.8	33	10	1.1	.00	.00	.00
14	.10	.96	2.5	2.3	4.4	2.8	119	185	1.0	.00	.00	.00
15	.08	.62	83	2.3	5.5	2.6	20	345	.90	.00	.00	.00
16	.07	.47	53	1.9	5.0	2.3	11	47	.84	.00	.00	.00
17	.05	.44	13	1.9	4.3	2.2	8.3	16	2.5	.00	.00	.00
18	.04	.40	8.4	1.5	3.7	2.5	6.4	11	1.5	.02	.00	.00
19	.04	.40	25	1.3	3.5	2.7	5.2	9.3	1.1	11	.00	.00
20	.09	1.2	11	1.4	3.2	2.9	4.4	6.8	.90	7.6	.00	.00
21	.21	49	6.7	7.4	3.0	23	3.8	5.4	1.2	.52	.00	.00
22	.13	30	5.2	114	3.0	8.4	3.4	12	.70	.14	.00	.00
23	.12	21	10	31	2.9	5.7	3.1	8.0	.50	.04	.00	.00
24	.12	12	23	16	2.7	4.8	2.9	6.5	.37	.00	.00	.00
25	.12	5.2	198	10	2.5	4.0	2.5	5.5	.29	.00	.00	.00
26	.10	4.7	50	7.7	2.2	3.6	2.3	4.5	.23	.00	.00	.00
27	.08	9.0	421	6.2	2.2	3.9	2.1	4.0	.19	.00	.00	.00
28	.07	81	72	5.2	2.2	4.0	2.6	3.7	.30	.00	22	.00
29	.07	15	19	5.0	---	3.3	2.6	6.0	.60	.00	.63	.00
30	.07	7.2	10	14	---	3.1	154	7.0	.45	.00	.09	.00
31	.10	---	7.8	7.9	---	2.8	---	5.0	---	.00	.22	---
TOTAL	3.36	242.87	1118.7	285.2	242.0	131.4	749.8	2096.0	86.27	21.22	23.59	1.63
MEAN	.11	8.10	36.1	9.20	8.64	4.24	25.0	67.6	2.88	.68	.76	.054
MAX	.66	81	421	114	98	23	167	424	25	11	22	1.5
MIN	.00	.12	2.5	1.3	2.2	1.8	2.1	3.7	.19	.00	.00	.00
CFSM	.01	.71	3.17	.81	.76	.37	2.19	5.93	.25	.06	.07	.005
IN.	.01	.79	3.65	.93	.79	.43	2.45	6.84	.28	.07	.08	.01

CAL YR 1982 TOTAL 6310.79 MEAN 17.3 MAX 520 MIN .00 CFSM 1.52 IN 20.59
WTR YR 1983 TOTAL 5002.04 MEAN 13.7 MAX 424 MIN .00 CFSM 1.20 IN 16.32

03369000 VERNON FORK MUSCATATUCK RIVER NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW¼SE¼ sec.17, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on left bank 0.3 mile downstream from Muscatatuck State School dam, 1.1 miles downstream from Brush Creek, 2 miles northwest of Butlerville, and at mile 50.6.

DRAINAGE AREA.--85.9 mi².

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville, and as Vernon Fork near Butlerville, October 1960 to September 1979.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 669.40 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--41 years, 94.0 ft³/s, 14.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s Jan. 21, 1959, gage height, 25.41 ft, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement at gage height 25.41 ft; no flow at times during 1944, 1945, 1949, and 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 27	1400	*5310	*12.59	May 2	0900	4460	11.50
May 1	1200	4000	10.88	May 3	0800	4680	11.80

Minimum daily discharge, 0.51 ft³/s Aug. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.95	44	55	60	16	28	1900	18	3.1	12	2.8
2	1.8	.90	49	48	645	15	63	2420	16	2.8	31	1.4
3	1.7	40	45	43	233	14	109	2510	56	2.2	1.3	1.1
4	2.0	33	62	36	115	13	73	600	101	2.7	1.8	.88
5	1.8	1.5	77	33	53	13	56	220	41	10	1.3	.92
6	1.8	1.2	100	32	49	35	66	133	27	7.4	1.0	1.4
7	2.8	1.4	51	31	46	47	118	85	21	3.5	.80	1.9
8	4.4	1.5	37	28	38	35	1090	280	17	2.3	.74	1.9
9	8.8	1.5	30	25	71	29	571	117	14	1.8	.75	1.7
10	5.6	1.5	25	25	63	25	252	83	12	1.5	.61	1.5
11	3.2	1.6	25	53	37	23	178	64	10	1.4	.51	1.7
12	2.5	4.9	22	77	34	21	121	54	8.9	1.2	22	2.1
13	2.0	4.7	17	43	28	20	149	58	7.7	1.2	25	11
14	1.7	5.9	17	14	27	19	857	405	7.0	1.1	1.5	24
15	1.5	5.1	144	15	29	18	253	1780	6.2	.98	1.3	.98
16	1.4	3.4	459	12	30	17	134	480	5.7	.84	1.2	.92
17	1.2	2.9	130	12	30	16	96	165	12	.84	1.0	.84
18	1.1	2.5	60	8.8	27	17	73	106	8.5	.93	.75	.77
19	1.1	2.3	93	7.3	26	19	59	85	6.7	.79	.66	.76
20	1.5	5.3	100	6.4	24	19	48	67	6.1	1.1	.66	.86
21	1.3	60	59	14	22	99	42	52	6.8	3.6	.63	.86
22	1.2	166	45	344	22	69	37	119	5.1	3.0	.71	.63
23	1.1	73	46	250	22	47	34	79	4.0	1.8	20	.59
24	1.0	83	92	152	21	39	32	49	3.5	1.5	22	.53
25	1.0	40	685	125	20	34	28	39	2.9	1.6	1.3	.53
26	.97	29	581	115	17	30	25	34	2.6	1.2	1.1	.62
27	.94	37	2290	73	16	31	22	27	2.4	1.0	1.0	.59
28	.93	261	695	37	16	39	22	26	2.5	.78	188	7.9
29	.92	145	226	35	---	34	24	27	4.5	1.0	17	8.1
30	.91	63	122	107	---	29	499	28	3.7	1.3	5.1	.92
31	1.1	---	69	87	---	27	---	21	---	1.1	5.4	---
TOTAL	61.37	1079.05	6497	1943.5	1821	909	5159	12113	439.8	65.56	368.12	80.70
MEAN	1.98	36.0	210	62.7	65.0	29.3	172	391	14.7	2.11	11.9	2.69
MAX	8.8	261	2290	344	645	99	1090	2510	101	10	188	24
MIN	.91	.90	17	6.4	16	13	22	21	2.4	.78	.51	.53
CFSM	.02	.42	2.45	.73	.76	.34	2.00	4.55	.17	.03	.14	.03
IN.	.03	.47	2.81	.84	.79	.39	2.23	5.25	.19	.03	.16	.03

CAL YR 1982 TOTAL 43205.22 MEAN 118 MAX 4590 MIN .90 CFSM 1.37 IN 18.71
WTR YR 1983 TOTAL 30537.10 MEAN 83.7 MAX 2510 MIN .51 CFSM .97 IN 13.22

03369500 VERNON FORK MUSCATATUCK RIVER AT VERNON, IN

LOCATION.--Lat 38°58'34", long 85°37'13", in NW¼SE¼ sec.10, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, at downstream end of left bank bridge pier, 1 mile southwest of Vernon, 3.1 miles downstream from Otter Creek, and at mile 36.4.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1979, published as Vernon Fork at Vernon.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft National Geodetic Vertical Datum of 1929, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank. Prior to Aug. 8, 1983, datum 2.30 ft higher.

REMARKS.--Records good. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diversion returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds.

AVERAGE DISCHARGE.--44 years, 221 ft³/s, 15.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft³/s Jan. 21, 1959, from rating curve extended above 24,000 ft³/s on basis of slope-area measurement of peak flow, gage height, 35.13 ft, present datum, from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s and maximum (*) at present datum:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 27	1600	*9540	*17.19	May 2	1200	7730	15.61
May 1	1500	8090	15.93	May 3	1100	8140	15.98

Minimum daily discharge, 0.4 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	2.3	136	170	141	46	71	4380	59	20	2.1	26
2	3.7	2.1	166	141	1230	45	118	4950	52	16	5.0	13
3	4.1	28	137	121	651	43	288	5670	177	11	23	9.0
4	3.7	52	131	107	310	41	211	2170	472	10	5.6	4.4
5	4.5	32	187	94	170	40	159	651	171	12	2.7	2.5
6	4.1	10	269	87	162	81	164	431	106	17	1.9	1.3
7	7.0	5.3	155	84	144	152	297	308	81	16	1.5	1.2
8	10	3.7	107	74	121	108	2210	651	67	11	1.6	1.2
9	47	3.7	86	68	129	85	1550	340	55	7.3	1.5	.92
10	21	4.9	73	66	170	73	720	234	47	6.4	2.4	.86
11	10	4.1	69	67	124	67	477	181	40	5.4	3.4	1.4
12	7.0	6.6	64	113	113	62	325	157	35	5.0	5.4	4.8
13	4.5	30	54	105	97	57	382	170	31	4.4	12	2.3
14	4.1	25	48	54	87	55	1830	1250	27	3.6	20	2.0
15	3.7	16	351	46	91	53	766	4320	25	3.3	4.5	17
16	3.4	14	1380	44	94	50	364	1520	23	2.9	1.5	3.2
17	3.2	16	404	40	91	48	260	465	27	2.9	1.4	1.0
18	3.0	11	211	36	82	51	203	259	63	12	1.4	.64
19	2.7	10	249	30	77	53	166	236	28	5.3	1.4	.45
20	3.5	14	329	29	73	54	139	204	24	42	1.5	.55
21	4.3	219	185	46	66	212	119	158	21	36	1.6	2.7
22	3.0	941	136	1110	64	220	106	279	19	15	2.8	1.8
23	2.6	354	141	790	61	139	97	261	18	10	7.0	1.1
24	2.5	348	368	431	59	110	91	150	15	7.6	20	.71
25	2.4	160	1410	282	57	94	83	114	14	5.4	21	.58
26	2.3	102	1960	242	51	83	72	97	12	4.2	5.4	.50
27	2.2	160	4890	197	47	83	68	83	11	3.6	5.1	.40
28	2.2	794	1840	124	46	94	67	76	11	3.0	191	.50
29	2.1	564	644	110	---	90	73	80	54	2.7	106	.59
30	2.1	209	354	164	---	77	1430	84	25	2.5	29	.58
31	2.4	---	221	231	---	71	---	74	---	2.1	15	---
TOTAL	182.4	4141.7	16755	5303	4608	2537	12906	30003	1810	305.6	503.7	103.18
MEAN	5.88	138	540	171	165	81.8	430	968	60.3	9.86	16.2	3.44
MAX	47	941	4890	1110	1230	220	2210	5670	472	42	191	26
MIN	2.1	2.1	48	29	46	40	67	74	11	2.1	1.4	.40
CFSM	.03	.70	2.73	.86	.83	.41	2.17	4.89	.31	.05	.08	.02
IN.	.03	.78	3.15	1.00	.87	.48	2.42	5.64	.34	.06	.09	.02

CAL YR 1982 TOTAL 95540.30 MEAN 262 MAX 9900 MIN 2.1 CFSM 1.32 IN 17.95
WTR YR 1983 TOTAL 79158.58 MEAN 217 MAX 5670 MIN .40 CFSM 1.10 IN 14.87

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30", in SW¼NE¼ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on downstream side of center pier of bridge on county road, 0.4 mile upstream from Mill Creek, 2.9 miles downstream from Sugar Creek, 3.9 miles northeast of Mitchell, 7.8 miles southeast of Bedford, and at mile 153.3.

DRAINAGE AREA.--3,861 mi².

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage, and Feb. 6, 1940, to Sept. 24, 1957, water-stage recorder, at site 9.8 miles downstream at datum 4.39 ft lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years (1939-43, 1957 to current year), 3,898 ft³/s, 13.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s Mar. 12, 1964; maximum gage height, 35.97 ft May 11, 1961; minimum daily discharge, 138 ft³/s Sept. 7, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft, from floodmark determined by Corps of Engineers, discharge, 155,000 ft³/s; at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 31	2400	20700	21.88	May 5	2300	*52500	*31.95
Apr. 14	1300	17400	20.02	May 19	0400	15300	18.69

Minimum daily discharge, 329 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	459	438	5670	20400	3420	1620	1970	11700	3120	3120	1710	730
2	457	428	5620	18100	4130	1580	2000	17500	2910	2840	938	627
3	443	419	5300	14000	6160	1530	2450	23000	3050	2320	719	563
4	433	423	5150	10600	7610	1510	3370	36900	4280	2180	670	517
5	423	433	4540	7930	8530	1470	4260	50300	5130	1930	664	487
6	414	433	4740	5530	8470	1580	4510	50400	5600	1670	637	462
7	419	443	4980	4310	6860	1830	5080	43000	4730	1610	643	448
8	433	472	4680	3810	5170	2170	7370	35300	3540	1760	670	438
9	627	467	3910	3470	4360	2420	10200	29400	2880	1600	627	428
10	1100	448	3230	3190	3900	2370	11500	24200	2540	1410	590	419
11	1500	438	2780	2980	3590	2160	13300	19700	2310	1280	563	404
12	1200	452	2450	2820	3450	1990	15400	15000	2130	1220	543	428
13	903	487	2210	2680	3290	1880	16100	11400	1960	1130	527	507
14	742	553	2020	2550	3100	1760	17100	9800	1830	1050	517	448
15	648	590	1970	2420	2900	1640	16200	11400	1730	979	522	414
16	595	600	3300	2290	2740	1560	15300	12000	1660	1010	558	393
17	558	600	5270	2150	2650	1540	16400	12800	1580	1020	553	378
18	533	590	6260	2040	2570	1520	16800	14600	1520	890	533	368
19	512	558	6350	1920	2450	1500	14900	15200	1550	834	522	358
20	502	548	6040	1790	2330	1530	11900	14000	1810	817	512	354
21	497	992	5240	1740	2210	1910	9000	12100	1780	799	502	356
22	507	3050	4400	2820	2120	2610	6370	10300	1610	790	492	351
23	502	4280	3570	5710	2050	3220	5130	8870	1540	843	482	353
24	497	4910	3410	7500	1980	3580	4510	8120	1430	919	482	348
25	482	4740	5240	7970	1920	3290	4070	7500	1320	828	477	342
26	472	4450	8870	7870	1860	2830	3730	6080	1230	730	462	338
27	467	3950	10300	7370	1780	2510	3420	4720	1170	714	467	338
28	462	4200	12400	6240	1690	2330	3150	4050	1130	681	497	335
29	452	5290	14100	4710	---	2200	2960	3860	1540	659	885	333
30	448	5590	17000	3830	---	2140	4690	3580	2670	637	879	329
31	448	---	20000	3510	---	2070	---	3350	---	637	856	---
TOTAL	18135	51272	191000	174250	103290	63850	253140	530130	71280	38907	19699	12594
MEAN	585	1709	6161	5621	3689	2060	8438	17100	2376	1255	635	420
MAX	1500	5590	20000	20400	8530	3580	17100	50400	5600	3120	1710	730
MIN	414	419	1970	1740	1690	1470	1970	3350	1130	637	462	329
CFSM	.15	.44	1.60	1.46	.96	.53	2.19	4.43	.62	.33	.16	.11
IN.	.17	.49	1.84	1.68	1.00	.62	2.44	5.11	.69	.37	.19	.12

CAL YR 1982 TOTAL 1779952 MEAN 4877 MAX 42000 MIN 414 CFSM 1.26 IN 17.15
WTR YR 1983 TOTAL 1527547 MEAN 4185 MAX 50400 MIN 329 CFSM 1.08 IN 14.72

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW¼SE¼ sec.21, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 05120208, on left bank at downstream side of county road bridge, 0.9 mile west of Leesville, 2.5 miles upstream from Jones Defeat Hollow, and 7 miles above mouth.

DRAINAGE AREA.--24.1 mi².

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 34.6 ft³/s, 19.50 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s July 21, 1973, gage height, 14.0 ft, from floodmarks, from rating extended above 550 ft³/s on basis of step-backwater analysis and contracted-opening and flow-over-road measurement of peak flow; no flow at times during 1971, 1975, 1976 and 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	0730	*2320	*7.00

Minimum daily discharge, 0.10 ft³/s July 27-29, Aug. 22, Sept. 20-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.58	40	42	23	4.6	18	812	12	2.7	40	3.0
2	.33	.58	35	35	151	4.6	63	457	10	1.6	4.9	1.0
3	.33	.58	146	29	91	4.3	69	473	110	1.1	2.3	.49
4	.33	.58	423	24	56	4.0	50	185	85	65	1.6	.26
5	.41	.58	143	21	40	4.0	42	124	44	20	1.1	.26
6	.41	.58	107	20	36	51	54	88	31	7.5	.90	.20
7	.49	.49	70	17	29	41	149	105	23	4.9	.78	35
8	.41	.58	45	15	26	31	309	159	17	3.7	.58	2.7
9	37	1.0	36	14	22	23	202	91	14	3.0	.49	1.3
10	12	3.5	30	15	20	20	131	68	11	2.5	.33	.67
11	5.9	4.0	25	14	18	16	94	50	8.4	1.9	.33	.67
12	4.3	3.2	20	12	15	14	72	42	7.1	1.6	.26	.67
13	3.2	2.5	17	11	12	12	157	44	5.9	1.3	.26	.41
14	2.3	2.3	16	10	12	12	432	183	4.9	1.0	.14	.26
15	2.1	1.9	48	9.4	12	10	139	274	4.0	1.0	.14	.20
16	1.7	1.9	116	9.0	11	9.3	88	157	3.7	.90	.14	.14
17	1.4	1.9	56	8.6	10	8.4	64	99	3.2	.58	.14	.14
18	1.4	1.8	50	8.3	9.3	10	49	73	2.7	.49	.14	.14
19	1.3	1.9	42	8.0	8.8	12	37	63	2.5	.41	.14	.14
20	1.4	2.5	34	7.8	7.9	17	31	45	2.7	.58	.14	.10
21	1.7	192	26	7.7	7.1	96	26	37	2.3	.49	.14	.10
22	1.7	115	25	139	7.1	54	22	57	1.7	.41	.10	.10
23	1.6	77	26	113	7.1	39	18	38	1.4	.33	.14	.10
24	1.4	57	26	73	6.3	31	15	29	1.3	.26	.41	.10
25	1.3	35	468	51	5.6	25	12	23	1.0	.20	.33	.10
26	1.3	34	185	39	4.9	21	11	19	.90	.14	.20	.10
27	1.0	42	407	31	4.6	25	9.8	15	.67	.10	.20	.10
28	.90	165	221	25	4.6	23	11	28	1.9	.10	7.1	.10
29	.67	88	133	22	---	19	11	33	12	.10	1.9	.10
30	.58	54	73	27	---	17	192	20	3.5	5.9	.58	.10
31	.58	---	52	23	---	16	---	15	---	12	.33	---
TOTAL	89.77	891.95	3141	880.8	657.3	674.2	2577.8	3906	428.77	141.79	66.24	48.75
MEAN	2.90	29.7	101	28.4	23.5	21.7	85.9	126	14.3	4.57	2.14	1.63
MAX	37	192	468	139	151	96	432	812	110	65	40	35
MIN	.33	.49	16	7.7	4.6	4.0	9.8	15	.67	.10	.10	.10
CFSM	.12	1.23	4.19	1.18	.98	.90	3.56	5.23	.59	.19	.09	.07
IN.	.14	1.38	4.85	1.36	1.01	1.04	3.98	6.03	.66	.22	.10	.08

CAL YR 1982 TOTAL 16304.85 MEAN 44.7 MAX 1760 MIN .10 CFSM 1.86 IN 25.17
WTR YR 1983 TOTAL 13504.37 MEAN 37.0 MAX 812 MIN .10 CFSM 1.54 IN 20.84

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE¼NW¼ sec.4, T.8 N., R.1 E., Monroe County, Hydrologic Unit 05120208, on downstream side of right pier of bridge on State Highway 46, 0.2 mile downstream from Kerr Creek, 4.0 miles west of Belmont, and 6.1 miles east of Bloomington.

DRAINAGE AREA.--10.9 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 14.2 ft^3/s, 17.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s July 13, 1979, gage height, 13.18 ft from rating curve extended above 1,200 ft^3/s on basis of contracted-opening measurements at gage heights of 11.52 ft and 13.18 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 350 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 3	1130	574	8.18	Apr. 30	2130	1160	10.19
Dec. 25	1445	*1310	*10.51	May 3	0445	530	7.97
Apr. 9	0545	589	8.25	June 3	1515	524	7.94

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	2.4	16	18	20	4.4	15	350	4.6	.33	.20	.27
2	.61	2.8	14	15	128	4.2	55	266	3.7	.33	.20	.27
3	.70	3.9	194	13	60	3.9	53	220	78	.33	.13	.27
4	.70	3.5	135	11	32	3.9	34	66	53	.33	.13	.27
5	.90	3.3	99	9.4	24	3.9	26	38	20	.33	.20	.20
6	1.1	2.9	61	8.7	19	16	26	26	13	.33	.20	.20
7	3.1	2.6	34	7.6	16	17	34	30	8.7	.33	.20	.27
8	2.1	2.4	23	7.3	15	17	63	43	5.7	.33	.20	.20
9	3.3	2.3	17	6.6	13	15	181	29	4.2	.27	.13	.20
10	3.1	2.1	15	6.6	13	14	68	22	3.3	.27	.07	.20
11	2.6	3.5	13	6.3	12	12	41	17	2.4	.27	.07	.20
12	2.1	18	11	5.7	10	11	30	16	2.0	.27	.07	.20
13	1.8	9.0	9.8	5.4	9.4	11	62	40	1.7	.27	.07	.13
14	1.4	6.0	8.7	5.2	8.7	9.8	187	87	1.4	.27	.00	.13
15	1.3	4.6	22	5.2	8.3	8.7	62	98	1.2	.27	.07	.07
16	1.1	3.9	46	4.9	8.0	8.3	37	57	1.1	.27	.00	.07
17	.99	3.5	29	4.6	7.3	7.6	26	33	.90	.20	.07	.07
18	.99	2.9	22	4.4	7.0	9.0	20	24	.80	.20	.00	.07
19	.90	2.8	18	4.4	6.6	10	16	20	.80	.20	.00	.00
20	.99	3.3	15	4.2	6.3	30	14	15	.80	.20	.00	.00
21	1.1	30	13	4.6	6.0	85	12	13	.70	.13	.00	.00
22	1.1	25	12	32	5.7	37	11	28	.61	.13	.00	.00
23	1.1	17	14	31	5.7	24	10	18	.53	.07	.00	.00
24	1.1	14	20	25	5.4	19	8.7	14	.46	.13	.00	.00
25	1.1	11	516	20	5.2	15	7.6	11	.46	.07	.00	.00
26	1.1	12	101	17	4.6	13	7.0	9.0	.46	.07	.00	.00
27	1.1	13	131	15	4.4	15	6.6	7.0	.40	.07	.00	.00
28	1.3	70	115	13	4.4	15	6.3	9.0	.40	.00	.46	.00
29	1.6	35	53	12	---	13	6.0	7.6	.33	.00	.33	.00
30	1.7	21	32	16	---	13	130	6.0	.33	.00	.27	.00
31	1.8	---	23	14	---	12	---	5.4	---	.13	.27	---
TOTAL	44.49	333.7	1832.5	353.1	465.0	477.7	1255.2	1625.0	211.98	6.40	3.34	3.29
MEAN	1.44	11.1	59.1	11.4	16.6	15.4	41.8	52.4	7.07	.21	.11	.11
MAX	3.3	70	516	32	128	85	187	350	78	.33	.46	.27
MIN	.61	2.1	8.7	4.2	4.4	3.9	6.0	5.4	.33	.00	.00	.00
CFSM	.13	1.02	5.42	1.05	1.52	1.41	3.84	4.81	.65	.02	.01	.01
IN.	.15	1.14	6.25	1.20	1.59	1.63	4.28	5.55	.72	.02	.01	.01

CAL YR 1982 TOTAL 6568.37 MEAN 18.0 MAX 516 MIN .51 CFSM 1.65 IN 22.41
WTR YR 1983 TOTAL 6611.70 MEAN 18.1 MAX 516 MIN .00 CFSM 1.66 IN 22.56

03372400 MONROE LAKE NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'24", long 86°30'56", in SW¼SW¼ sec.27, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, in discharge tower of reservoir on Salt Creek, 1.3 miles upstream from Clear Creek, 2.2 miles southeast of Harrodsburg, and 26.1 miles upstream from mouth.

DRAINAGE AREA.--432 mi².

PERIOD OF RECORD.--April 1966 to September 1983 (discontinued). Prior to September 1970 published as Monroe "Reservoir".

GAGE.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 3.75 ft wide and 12.0 ft high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 22,300 acre-ft, elevation, 515 ft. Seasonal pool capacity is 182,000 acre-ft, elevation 538.0 ft. Capacity at uncontrolled spillway elevation, 556 ft is 446,000 acre-ft. Reservoir is used for flood control, water supply of Bloomington, and recreation. Reservoir put in operation on Apr. 26, 1966.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 363,600 acre-ft May 17, 1983, elevation, 551.53; minimum, 149,500 acre-ft Nov. 7, 1966, elevation, 534.77 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 363,600 acre-ft May 17, elevation 551.53 ft; minimum, 165,430 acre-ft Sept. 30, elevation 536.39 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	538.45	187,120	
Oct. 31	537.99	182,140	-4,980
Nov. 30	539.14	194,750	+12,610
Dec. 31	542.50	234,430	+39,680
CAL YR 1982			+44,670
Jan. 31	536.75	169,110	-65,320
Feb. 28	538.01	182,360	+13,250
Mar. 31	538.14	183,760	+1,400
Apr. 30	543.27	244,130	+60,370
May 31	548.75	320,140	+76,010
June 30	542.13	229,850	-90,290
July 31	537.77	179,790	-50,060
Aug. 31	537.20	173,770	-6,020
Sept. 30	536.39	165,430	-8,340
WTR YR 1983			-21,690

03372500 SALT CREEK NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'16", long 86°30'31", in NE¼NW¼ sec.34, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, on right bank 0.35 mile downstream from Monroe Lake, 0.9 mile upstream from Clear Creek, 2.2 miles southeast of Harrodsburg, and 25.7 miles upstream from mouth.

DRAINAGE AREA.--432 mi².

PERIOD OF RECORD.-May 1955 to current year.

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 480.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 1, 1960, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mile upstream at datum 2.41 ft higher.

REMARKS.--Flow regulated by Monroe Lake (See sta 03372400). Daily discharge computed from relation between discharge, head, and gage openings for Monroe Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--28 years, 494 ft³/s, 15.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s June 25, 1960, gage height, 32.76 ft site and datum then in use; maximum gage height at present site and datum, 35.35 ft May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,170 ft³/s June 17; minimum daily, 41 ft³/s Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	58	386	217	498	54	366	224	2040	1920	54	53
2	64	56	569	218	100	54	366	230	2040	1910	54	53
3	64	56	585	218	53	54	368	235	1530	1900	54	53
4	64	56	580	218	54	54	745	238	1020	1890	54	53
5	64	56	584	389	54	54	1060	238	1020	1880	55	53
6	64	56	368	906	54	128	1060	238	1340	1960	55	53
7	64	56	432	1460	54	432	722	238	1350	2000	54	53
8	64	56	589	1610	127	741	357	239	1020	1990	54	53
9	64	56	589	1610	228	881	210	240	1020	1910	54	53
10	64	56	874	1600	228	880	212	240	1020	1630	54	53
11	64	56	1090	1600	284	879	213	370	1010	1370	54	76
12	64	56	1090	1780	366	878	213	499	1010	952	54	51
13	64	56	1240	1880	366	498	215	500	1400	559	53	53
14	64	56	1490	1880	366	200	217	502	1880	350	53	53
15	64	56	1560	1870	365	200	221	505	2040	115	53	53
16	64	56	1560	1860	365	200	223	850	2140	54	53	53
17	63	56	1560	1850	262	200	224	1180	2170	54	53	52
18	63	56	1550	1840	127	284	224	1510	2160	54	53	52
19	63	56	1550	1690	41	365	224	1510	2150	54	53	52
20	63	56	1540	1030	54	365	225	1680	1880	54	53	52
21	63	56	1700	1660	54	367	691	1880	1680	54	53	52
22	63	56	1820	1820	54	550	1260	1880	1670	54	53	52
23	63	56	1820	1820	146	894	1470	1870	1660	54	53	52
24	63	56	1810	1820	200	1050	1470	1870	1820	54	53	52
25	63	56	983	1810	200	971	1460	2010	1970	54	53	52
26	63	57	209	1810	200	730	1460	2080	1960	54	53	52
27	63	57	213	1800	127	729	1460	2070	1950	54	53	52
28	63	57	215	1780	54	728	1120	2070	1940	54	53	52
29	63	57	216	1770	---	728	514	2060	1930	54	53	52
30	63	57	217	1770	---	547	318	2060	1920	54	53	52
31	63	---	217	1310	---	366	---	2050	---	54	53	---
TOTAL	1969	1687	29206	44896	5081	15061	18888	33366	49740	23200	1657	1597
MEAN	63.5	56.2	942	1448	181	486	630	1076	1658	748	53.5	53.2
MAX	64	58	1820	1880	498	1050	1470	2080	2170	2000	55	76
MIN	63	56	209	217	41	54	210	224	1010	54	53	51
CFSM	.15	.13	2.18	3.35	.42	1.13	1.46	2.49	3.84	1.73	.12	.12
IN.	.17	.15	2.51	3.87	.44	1.30	1.63	2.87	4.28	2.00	.14	.14

CAL YR 1982 TOTAL 213786 MEAN 586 MAX 2100 MIN 51 CFSM 1.36 IN 18.41
WTR YR 1983 TOTAL 226348 MEAN 620 MAX 2170 MIN 41 CFSM 1.44 IN 19.49

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'31", in SW¼NW¼ sec.30, T.3 N., R.3 W., Martin County, Hydrologic Unit 05120208, at left downstream side of U.S. Highway 50 bridge at Shoals, 340 ft upstream from Baltimore and Ohio Railroad bridge, 0.9 mile upstream from Beaver Creek, 6.6 mi downstream from Indian Creek, and at mile 105.3.

DRAINAGE AREA.--4,927 mi².

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-6, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Oct. 26, 1932.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--69 years (1903-5, 1909-16, 1923 to current year), 5,434 ft³/s, 14.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s Mar. 28, 1913, gage height, 42.2 ft, from rating curve extended above 100,000 ft³/s; minimum daily, 64 ft³/s Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 15	0700	22400	16.93
May 7	2300	*49700	*27.77

Minimum daily discharge, 408 ft³/s Sep. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	552	6860	19700	5470	2090	3170	17100	5470	4770	2200	977
2	593	561	7030	19700	6050	2020	3530	25800	5150	5000	3780	901
3	574	561	8140	18100	9530	1970	5340	29500	5590	4540	1650	793
4	563	527	13000	14800	9250	1960	5390	31900	8230	4210	1100	720
5	545	527	12500	10900	9490	1930	5910	35700	7410	4300	922	678
6	529	527	9810	8140	9790	2190	6780	43300	7030	3900	870	633
7	529	527	7720	6330	8940	3010	8580	48700	7010	3670	831	605
8	531	527	6780	5910	6860	3390	10400	48700	5910	3720	802	686
9	725	552	6030	5660	5440	3710	15300	44300	4630	3770	802	651
10	1400	561	5100	5320	5010	3900	16600	36900	4050	3540	784	605
11	1770	544	4630	5030	4570	3730	15900	29800	3730	3200	747	570
12	1840	578	4370	4790	4320	3510	16300	22600	3510	2850	703	561
13	1480	678	4000	4750	4170	3340	17500	17600	3360	2430	695	527
14	1190	795	3820	4700	3960	3040	20600	15100	3430	1900	669	561
15	966	793	3920	4570	3790	2550	22100	17600	3750	1640	661	561
16	840	774	5490	4430	3600	2370	19600	17200	4090	1340	651	529
17	765	765	7460	4240	3440	2260	17900	16100	3870	1240	669	494
18	712	756	8510	4130	3310	2240	18000	16500	3860	1230	686	472
19	678	738	8790	3980	3100	2290	17600	17500	3790	1110	686	452
20	661	729	8580	3750	2910	2450	15600	17400	3860	1040	678	438
21	642	1080	7890	3200	2770	3390	12600	16200	3850	1010	651	435
22	623	5080	7060	4660	2660	4770	9490	14800	3540	1000	642	429
23	623	5840	6350	8740	2560	4660	7670	13400	3390	1000	642	428
24	614	5930	5800	10300	2530	5150	6780	11600	3300	1060	623	417
25	605	5800	7870	10800	2510	5290	6230	10600	3290	1150	614	415
26	587	5340	16200	10600	2450	4750	5840	9550	3390	1050	605	415
27	578	5170	18100	10200	2370	4170	5490	7940	3350	917	596	415
28	570	5660	19000	9350	2240	4050	5170	6760	3350	867	596	415
29	570	8280	18400	7870	---	3860	4680	6590	3360	829	623	414
30	552	7310	17700	6570	---	3640	5570	6210	3940	802	860	408
31	552	---	18700	6050	---	3430	---	5780	---	785	1010	---
TOTAL	24015	68060	285610	247270	133090	101110	331620	658730	132490	69870	28048	16605
MEAN	775	2269	9213	7976	4753	3262	11050	21250	4416	2254	905	554
MAX	1840	8280	19000	19700	9790	5290	22100	48700	8230	5000	3780	977
MIN	529	527	3820	3200	2240	1930	3170	5780	3290	785	596	408
CFSM	.16	.46	1.87	1.62	.97	.66	2.24	4.31	.90	.46	.18	.11
IN.	.18	.51	2.16	1.87	1.00	.76	2.50	4.97	1.00	.53	.21	.13

CAL YR 1982 TOTAL 2508812 MEAN 6873 MAX 48300 MIN 527 CFSM 1.40 IN 18.94
WTR YR 1983 TOTAL 2096518 MEAN 5744 MAX 48700 MIN 408 CFSM 1.17 IN 15.83

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN

LOCATION.--Lat 38°35'10", long 86°38'03", in SW¼SE¼ sec.21, T.2 N., R.2 W., Orange County, Hydrologic Unit 05120208, on left bank 20 ft downstream from bridge on U.S. Highway 150, 1.7 miles northwest of West Baden Springs, 3.8 miles downstream from Lick Creek, and at mile 34.8.

DRAINAGE AREA.--287 mi^2.

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1965, published as Lost River near West Baden.

GAGE.--Water-stage recorder. Datum of gage is 457.92 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except for those periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--18 years, 374 ft^3/s, 17.70 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s May 1, 1983, gage height, 26.55 ft; minimum daily, 7.5 ft^3/s Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft, from floodmarks, discharge, 14,500 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 28	0700	3980	22.58	May 1	2100	*11100	*26.55
Apr. 9	1200	2600	21.18	May 15	2300	5070	23.40
Apr. 15	0500	2450	20.96				

Minimum daily discharge, 14 ft^3/s Sept. 30.

NOTE.--No gage-height record Oct. 1-5, July 7-19, and Aug. 2-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	50	798	1120	311	116	171	7660	283	91	143	21
2	36	51	729	790	787	113	333	8760	252	86	540	20
3	34	52	740	644	1270	109	680	7180	334	82	500	20
4	32	51	1210	529	902	105	545	5520	714	80	210	19
5	30	50	1200	455	624	104	425	3760	515	101	110	18
6	30	48	1090	413	524	460	526	2510	363	107	50	18
7	139	45	808	382	462	580	1110	2040	287	83	33	18
8	153	44	614	351	395	417	1710	1920	249	66	30	17
9	625	42	509	320	358	301	2520	1700	223	56	28	17
10	1010	42	435	303	337	247	2340	1290	202	52	26	15
11	492	42	384	289	317	218	1940	1010	187	48	24	17
12	311	58	343	283	289	196	1470	906	175	45	23	36
13	224	123	301	262	264	181	1130	1700	164	42	22*	138
14	171	106	274	252	247	172	2000	2980	155	40	21	50
15	141	76	415	245	231	161	2410	4510	148	39	20	29
16	120	58	1220	231	216	149	2050	4280	142	37	20	23
17	104	53	1020	222	204	141	1540	2930	135	36	21	21
18	91	50	704	210	190	143	979	2100	130	34	22	20
19	82	48	566	196	181	149	658	1680	126	33	24	18
20	76	52	481	188	171	151	531	1220	249	31	25	18
21	71	366	413	246	161	461	464	910	401	30	23	19
22	65	1330	361	1060	155	473	415	848	205	29	21	17
23	61	1180	366	1510	151	348	369	855	146	28	23	18
24	58	930	596	1130	146	278	334	692	125	27	27	17
25	55	645	1110	740	137	243	300	594	114	26	35	16
26	55	485	2420	551	127	217	274	542	108	25	31	16
27	53	645	3160	459	121	216	251	493	101	25	28	16
28	50	1160	3770	391	118	227	237	456	108	24	58	15
29	48	1590	3000	347	---	202	253	398	104	24	50	15
30	49	1160	2160	329	---	181	1920	344	98	23	37	14
31	50	---	1660	335	---	172	---	310	---	25	23	---
TOTAL	4554	10632	32857	14783	9396	7231	29885	72098	6543	1475	2248	716
MEAN	147	354	1060	477	336	233	996	2326	218	47.6	72.5	23.9
MAX	1010	1590	3770	1510	1270	580	2520	8760	714	107	540	138
MIN	30	42	274	188	118	104	171	310	98	23	20	14
CFSM	.51	1.23	3.69	1.66	1.17	.81	3.47	8.11	.76	.17	.25	.08
IN.	.59	1.38	4.26	1.92	1.22	.94	3.87	9.35	.85	.19	.29	.09

CAL YR 1982 TOTAL 192595 MEAN 528 MAX 5730 MIN 24 CFSM 1.84 IN 24.96
WTR YR 1983 TOTAL 192418 MEAN 527 MAX 8760 MIN 14 CFSM 1.84 IN 24.94

03373980 WHITE RIVER ABOVE PETERSBURG, IN

LOCATION.--Lat 38°31'42", long 87°15'14", in NE¼SW¼ sec.12, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 100 ft upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 miles downstream from East Fork White River, 2.2 miles upstream from State Highway 61, 2.8 miles northeast of Petersburg, and at mile 48.0.

DRAINAGE AREA.--11,123 mi².

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Discharges below 1500 ft³/s only published. For a complete record of White River in this vicinity use records of White River at Petersburg, IN (sta. 03374000), 2.3 miles downstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												---
2												---
3												---
4												---
5												---
6												---
7												---
8												---
9												---
10												---
11												---
12												---
13												---
14												---
15												---
16												---
17												1550
18												1470
19												1410
20												1340
21												1330
22												1310
23												1250
24												1250
25												1250
26												1250
27												1230
28												1220
29												1210
30												1190
31												---
TOTAL												---
MEAN												---
MAX												---
MIN												---
CFSM												---
IN.												---

03374000 WHITE RIVER AT PETERSBURG, IN

LOCATION.--Lat 38°30'39", long 87°17'22", in SE¼SW¼ sec.15, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 300 ft downstream from bridge on State Highway 61, 0.4 mile upstream from Prides Creek, 1.4 miles north of Petersburg, and at mile 45.7.

DRAINAGE AREA.--11,125 mi².

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 11,757 ft³/s, 14.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183,000 ft³/s Jan. 22, 1937, gage height, 28.3 ft present datum, 31.58 ft site and datum then in use; minimum daily, 573 ft³/s Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft, present site and datum, from floodmarks by Corps of Engineers. Discharge, 235,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 91,700 ft³/s May 8, gage height, 24.56 ft; minimum daily, 1,180 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	1800	15100	65500	12100	5760	10100	33300	12100	6470	2410	2220
2	1880	1820	14100	62300	14500	5540	10700	52200	11300	7100	3490	2230
3	1830	1940	15900	56000	20400	5370	13900	67700	11900	7860	5510	2070
4	1810	2050	27500	46400	23400	5240	17100	84800	16000	8340	4260	1900
5	1780	2050	32000	35000	24300	5190	18400	89800	19300	8330	3260	1770
6	1740	2000	33200	24500	23600	8560	20500	89500	19500	8180	2730	1680
7	2000	1980	32800	18400	21500	8780	23400	88800	16300	7920	2490	1610
8	2280	1890	32200	15100	19000	9180	25800	91200	15100	7680	2330	1560
9	2930	1820	31300	13900	15900	9410	31300	90400	13900	7470	2230	1580
10	4780	1780	27800	13200	13700	9270	34700	82900	11700	7210	2170	1640
11	4830	1750	20200	12600	12500	8860	35100	70300	10400	6920	2100	1700
12	4820	1890	14500	12000	11500	8320	34600	59600	9500	6540	1990	1830
13	4220	2180	12500	11600	10800	7800	34700	51200	8740	6090	1900	1690
14	3610	2510	11100	11300	10300	7340	39600	45700	8210	5620	1850	1530
15	3070	2690	10500	11100	9720	6780	44000	44900	7880	4840	1960	1540
16	2890	2780	12200	10800	9240	6120	46400	41900	7890	4310	2010	1570
17	2790	2580	14000	10500	8860	5770	47600	38800	7820	3880	1930	1480
18	2600	2420	15600	10100	8530	5610	46500	35500	7640	3620	1880	1420
19	2450	2360	16100	9740	8240	5610	44700	33000	7470	3490	1850	1350
20	2400	2260	15800	9430	7900	5750	41000	31600	7790	3300	1820	1320
21	2320	3060	15100	9200	7480	7920	33700	30300	8150	3140	1780	1320
22	2250	6090	14200	10100	7170	11200	26000	30300	8960	3040	1800	1290
23	2200	8590	13200	12500	6900	14300	20000	28600	8840	3170	1730	1260
24	2160	9350	12500	16000	6680	14400	16800	25800	8230	3230	1670	1240
25	2130	9220	18200	17700	6470	13400	15300	23400	7630	3050	1670	1250
26	2080	9170	33100	17700	6300	12700	14200	21500	7100	2960	1690	1250
27	2040	9440	40400	16700	6160	12100	13300	19400	6820	2830	1670	1220
28	1990	10900	52500	15500	5970	11700	12600	16700	6650	2680	1860	1200
29	1900	13500	63100	14400	---	11600	12200	14900	6470	2570	1750	1180
30	1850	15700	66100	13400	---	11700	18700	13900	6390	2470	1680	1200
31	1840	---	67200	12800	---	10800	---	13100	---	2420	1760	---
TOTAL	79410	137570	800000	615470	339120	272080	802900	1461000	305680	156730	69230	46100
MEAN	2562	4586	25810	19850	12110	8777	26760	47130	10190	5056	2233	1537
MAX	4830	15700	67200	65500	24300	14400	47600	91200	19500	8340	5510	2230
MIN	1740	1750	10500	9200	5970	5190	10100	13100	6390	2420	1670	1180
CFSM	.23	.41	2.32	1.78	1.09	.79	2.41	4.24	.92	.45	.20	.14
IN.	.27	.46	2.68	2.06	1.13	.91	2.68	4.89	1.02	.52	.23	.15

CAL YR 1982 TOTAL 5946160 MEAN 16290 MAX 83800 MIN 1740 CFSM 1.46 IN 19.88
WTR YR 1983 TOTAL 5085290 MEAN 13930 MAX 91200 MIN 1180 CFSM 1.25 IN 17.00

03374100 WHITE RIVER AT HAZLETON, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°29'23", long 87°33'00", in SE¼NW¼ sec.29, T.1 N., R.10 W., Gibson County, Hydrologic Unit 05120202, on downstream side of county road bridge (Old U.S. 41) at Hazleton, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--11,305 mi^2 (29,280 km^2).

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: October 1973 to September 1981. Records published in water-data report IN-80-1 are unreliable and should not be used.
CHEMICAL ANALYSES: February 1973 to current year.
WATER TEMPERATURE: October 1973 to September 1981. Records published in water-data report IN-80-1 are unreliable and should not be used.
SEDIMENT DISCHARGE: October 1973 to current year.
WATER DISCHARGE: October 1927 to September 1938.

REMARKS.--Water discharge obtained from station White River at Petersburg (See sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 33.5°C Aug. 14, 1976; 0.0°C on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21, 1977; minimum, 192 micromhos Nov. 6, 1974.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
DEC												
16...	1530	12600	483	7.7	1.8	5.5	40	--	757	1080	K6550	210
MAR												
14...	1500	7300	474	8.3	12.0	9.5	21	13.6	766	K61	K183	210
MAY												
23...	1550	28200	345	7.3	20.0	19.1	60	7.8	770	K9130	K6840	160
AUG												
16...	1320	4290	498	8.3	32.2	28.9	28	15.5	773	--	--	210
16...	1330	--	--	--	--	--	--	--	--	--	--	--

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
DEC												
16...	53	57	16	15	13	.5	2.6	156	46	19	.10	10
MAR												
14...	53	55	18	16	14	.5	2.2	159	63	23	.20	4.3
MAY												
23...	43	45	12	6.5	8	.2	2.7	119	35	10	.20	6.7
AUG												
16...	49	44	25	27	21	.8	3.3	164	74	35	.20	.0
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS TOTAL (MG/L AS PO4)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
DEC												
16...	223	260	.30	7590	2.0	.190	.24	.80	.210	.64	.080	.070
MAR												
14...	307	278	.42	6050	1.8	.020	.03	.60	.180	.55	.160	.060
MAY												
23...	237	190	.32	--	1.8	.030	.04	1.00	.160	.49	.070	.030
AUG												
16...	387	307	.53	--	<.10	<.010	--	.80	.100	.31	.030	<.010
16...	--	--	--	--	--	--	--	--	--	--	--	--

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC												
16...	.21	150	1	76	<1	<1	<1	<3	--	320	--	<4
MAR												
14...	.18	<10	1	54	<1	1	<1	<3	19	34	4	<4
MAY												
23...	.09	70	1	55	0	1	<1	3	11	68	4	4
AUG												
16...	--	10	1	85	<.5	<1	4	<3	3	16	<1	5
16...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM
DEC												
16...	29	.9	<10	--	<1	<1	170	<6.0	8	--	3440	--
MAR												
14...	4	.6	<10	7	<1	<1	180	<6.0	14	53	1040	--
MAY												
23...	9	.1	10	3	<1	<1	110	6.0	3	142	10800	--
AUG												
16...	3	.3	<10	1	<1	<1	200	<6.0	3	92	1070	--
16...	--	--	--	--	--	--	--	--	--	--	--	1

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW¼SE¼ sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, on downstream edge of center pier of county road bridge, 0.3 mile downstream from Fudge Creek, 0.7 mile northeast of Valeene, 6.0 miles southwest of Hardinsburg, and at mile 158.0.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 26.3 ft³/s, 27.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,270 ft³/s July 26, 1979, gage height, 11.35 ft; no flow for several days in 1971, 1972, 1975, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 25	1715	810	5.75	May 1	1145	*2540	*8.98
Dec. 27	1130	1080	6.54	May 3	0445	1140	6.70
Apr. 8	0900	1090	6.56	May 13	0345	1160	6.74
Apr. 30	0930	2180	8.56	May 14	1545	1170	6.78

Minimum daily discharge, No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	47	28	13	4.4	12	985	6.7	.50	2.0	.00
2	1.5	1.5	43	23	152	4.2	53	224	5.7	.36	.26	.00
3	1.5	1.5	34	18	75	4.0	57	500	25	.26	.18	.00
4	1.5	1.3	42	14	43	3.7	37	150	24	.95	.13	.00
5	1.6	1.2	68	12	31	3.7	29	74	12	.95	.13	.00
6	1.6	1.1	56	11	25	72	46	47	8.5	.36	.13	.00
7	3.1	.95	36	11	24	49	92	38	6.7	.36	.06	.00
8	3.5	.95	24	9.3	19	32	463	62	5.5	.36	.06	.00
9	145	.95	17	8.5	17	22	155	38	4.6	.36	.00	.00
10	55	.84	14	8.1	15	18	95	27	4.0	.26	.00	.00
11	19	.84	13	7.4	14	15	76	22	3.3	.26	.00	1.6
12	10	2.3	10	6.4	13	13	51	19	3.0	.18	.00	1.9
13	5.5	7.4	8.9	5.7	12	12	72	490	2.8	.13	.00	.57
14	3.3	2.8	8.1	5.2	12	11	309	566	2.5	.06	.00	.36
15	2.8	2.1	134	4.9	11	9.7	86	368	2.3	.13	.00	.13
16	2.5	2.0	147	4.4	10	8.9	51	128	2.1	.26	.00	.09
17	2.0	1.9	61	4.2	9.3	8.1	36	62	1.9	.26	.00	.00
18	1.9	1.7	41	3.7	8.5	9.3	27	41	1.9	.26	.00	.00
19	1.7	1.6	33	3.7	8.1	9.3	21	50	1.7	.36	.00	.00
20	2.5	2.8	23	3.5	7.0	11	17	35	1.9	.18	.00	.00
21	2.3	100	16	5.5	6.7	76	15	38	1.5	.18	.00	.00
22	2.0	150	13	186	6.4	36	13	134	1.2	.13	.09	.00
23	1.9	140	104	107	6.7	25	12	56	1.2	.13	.18	.00
24	1.7	92	116	65	6.0	20	11	32	1.1	.13	.09	.00
25	1.7	50	317	43	5.5	17	9.3	22	.95	.18	.00	.00
26	1.5	41	170	30	4.6	15	8.1	18	.84	.26	.00	.00
27	1.3	107	627	22	4.4	19	7.4	14	.66	.18	.00	.00
28	1.2	264	202	16	4.4	17	8.5	12	.66	.09	.06	.00
29	1.2	93	87	14	---	14	17	11	.66	.06	.06	.00
30	1.5	51	55	17	---	13	836	9.3	.50	.06	.13	.00
31	1.3	---	40	14	---	12	---	8.1	---	.00	.00	---
TOTAL	284.4	1125.03	2607.0	711.5	563.6	584.3	2722.3	4280.4	135.37	8.20	3.56	4.65
MEAN	9.17	37.5	84.1	23.0	20.1	18.8	90.7	138	4.51	.26	.11	.16
MAX	145	264	627	186	152	76	836	985	25	.95	2.0	1.9
MIN	1.2	.84	8.1	3.5	4.4	3.7	7.4	8.1	.50	.00	.00	.00
CFSM	.72	2.93	6.57	1.80	1.57	1.47	7.09	10.8	.35	.02	.009	.01
IN.	.83	3.27	7.58	2.07	1.64	1.70	7.91	12.44	.39	.02	.01	.01

CAL YR 1982 TOTAL 13875.64 MEAN 38.0 MAX 1070 MIN .19 CFSM 2.97 IN 40.32
WTR YR 1983 TOTAL 13030.31 MEAN 35.7 MAX 985 MIN .00 CFSM 2.79 IN 37.87

03374498 PATOKA LAKE NEAR CUZCO, IN

LOCATION.--Lat 38°25'58", long 86°42'30", in SW¼NE¼ sec.14, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, in discharge tower of reservoir on Patoka River, 2.9 miles south of Cuzco and 5.0 miles upstream from Dillon Creek, and at river mile 118.2.

DRAINAGE AREA.--168 mi².

PERIOD OF RECORD.--February 1978 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock fill dam. Releases normally controlled by two gates, 8.0 ft wide and 12.0 ft high, in an oblong concrete conduit through dam. Minimum pool capacity is 12,211 acre-ft elevation 506 ft. Seasonal pool capacity is 178,730 acre-ft, elevation, 536 ft. Capacity at uncontrolled spillway elevation, 548 ft is 298,380 acre-ft. Reservoir is used for flood control, water supply, water quality, and recreation. Reservoir put in operation on Feb. 13, 1978.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 288,500 acre-ft May 16, 1983, elevation, 547.17 ft; minimum, 26,330 acre-ft June 12, 1978, elevation, 511.57 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 288,500 acre-ft May 16, elevation, 547.17 ft; minimum, 148,300 acre-ft Mar. 1-3, elevation, 532.39 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	537.37	190,900	
Oct. 31	537.17	189,100	-1,800
Nov. 30	538.30	199,300	+10,200
Dec. 31	539.90	214,300	+15,000
CAL YR 1982			+41,700
Jan. 31	535.03	170,100	-44,200
Feb. 28	532.45	148,800	-21,300
Mar. 31	532.81	151,600	+2,800
Apr. 30	538.92	205,100	+53,500
May 31	542.27	237,000	+31,900
June 30	541.52	229,700	-7,300
July 31	539.46	210,100	-19,600
Aug. 31	536.87	186,400	-23,700
Sept. 30	535.32	172,600	-13,800
WTR YR 1983			-18,400

03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat 38°26'29", long 86°43'31", in SW¼SE¼ sec.10, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, on right bank 200 ft upstream from county road bridge, 2.1 miles downstream from Patoka Lake, 2.2 miles southwest of Cuzco, 2.8 miles upstream from Dillon Creek, and at mile 116.1.

DRAINAGE AREA.--171 mi².

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--None. Datum of gage was 477.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 200 ft downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described in "LOCATION" paragraph. Prior to October 1979, published as "near Ellsworth".

REMARKS.--Flow regulated by Patoka Lake (See sta 03374498). Daily discharge computed from relation between discharge, head, and gate openings for Patoka Lake beginning Oct. 1, 1981.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--22 years, 228 ft³/s, 18.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft³/s Mar. 10, 1964, gage height, 20.02 ft; no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft according to information by local resident, discharge, 12,300 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,810 ft³/s May 27; minimum daily, 30 ft³/s Oct. 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	66	298	303	1090	38	176	55	510	253	298	389
2	196	66	362	424	803	31	101	55	392	253	361	389
3	131	66	395	499	671	31	101	56	192	253	386	388
4	66	66	198	499	715	31	102	56	104	253	387	388
5	66	211	100	630	795	31	102	56	104	253	397	388
6	66	259	100	777	794	31	102	56	69	253	397	387
7	66	162	233	890	931	31	68	56	52	253	396	228
8	66	65	364	1020	999	53	51	56	52	277	396	97
9	42	65	465	1090	996	63	52	56	52	290	148	97
10	30	65	567	1090	994	87	52	106	52	302	50	97
11	30	65	600	1170	992	161	52	139	52	302	268	128
12	30	65	599	1210	990	202	52	96	52	302	396	146
13	30	65	743	1200	987	202	52	53	52	302	396	146
14	30	65	815	1200	827	235	52	54	52	202	395	146
15	54	65	617	1170	639	251	52	87	52	173	395	146
16	66	65	395	1150	503	251	52	569	52	166	395	145
17	66	65	531	1140	428	251	52	896	117	166	394	145
18	66	224	717	1140	263	251	52	1100	154	301	394	145
19	66	303	816	1140	204	251	87	1600	154	301	394	145
20	66	303	914	1130	204	251	105	2040	217	301	393	145
21	66	201	984	834	204	218	105	2020	254	301	393	145
22	66	99	982	504	173	202	105	2210	167	300	393	145
23	131	99	981	663	158	235	105	2400	103	300	392	145
24	131	99	981	505	86	251	105	2390	103	300	392	145
25	66	99	580	705	50	251	179	2500	103	300	312	145
26	66	164	100	994	50	251	212	2750	103	300	391	145
27	66	197	101	1100	50	251	212	2810	204	299	391	145
28	66	132	102	1100	50	251	172	2800	254	299	391	145
29	131	99	102	1100	---	251	94	2350	254	299	391	145
30	195	232	236	1090	---	251	79	1490	254	299	390	145
31	131	---	303	1090	---	251	---	772	---	298	390	---
TOTAL	2495	3797	15281	28557	15646	5396	2883	31734	4332	8451	11262	5735
MEAN	80.5	127	493	921	559	174	96.1	1024	144	273	363	191
MAX	196	303	984	1210	1090	251	212	2810	510	302	397	389
MIN	30	65	100	303	50	31	51	53	52	166	50	97
CFSM	.47	.74	2.88	5.39	3.27	1.02	.56	5.99	.84	1.60	2.12	1.12
IN.	.54	.83	3.32	6.21	3.40	1.17	.63	6.90	.94	1.84	2.45	1.25

CAL YR 1982 TOTAL 98143 MEAN 269 MAX 1060 MIN 30 CFSM 1.57 IN 21.35
WTR YR 1983 TOTAL 135569 MEAN 371 MAX 2810 MIN 30 CFSM 2.17 IN 29.49

03375500 PATOKA RIVER AT JASPER, IN

LOCATION.--Lat 38°24'49", long 86°52'36", in NW¼SE¼ sec.20, T.1 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on left bank 0.3 mile upstream from unnamed outlet of Jasper Lake, 1.0 mile downstream from Coon Seitz bridge, 1.2 miles downstream from Beaver Creek, 3.3 miles northeast of Jasper, and at mile 91.5.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 446.00 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 miles downstream, used for high-water periods when flow exceeds about 2,500 ft³/s, at datum 0.34 ft lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 miles downstream at datum 0.34 ft lower.

REMARKS.--Records good. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978 (See sta 03374498).

AVERAGE DISCHARGE.--35 years (water years 1949 to current year), 368 ft³/s, 19.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s Mar. 11, 1964, gage height, 15.17 ft at downstream gage; maximum gage height at upstream gage, 21.20 ft Mar. 11, 1964, from floodmarks; no flow at times during 1948, 1952-56, 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.9 ft at downstream site, from floodmark furnished by local residents, discharge, 16,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,410 ft³/s May 2, gage height, 16.91 ft; minimum daily, 60 ft³/s June 17

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	197	652	508	1280	102	337	2980	1900	229	294	377
2	107	104	764	476	1370	94	444	3820	1450	229	303	381
3	181	90	842	577	1470	83	580	2370	923	233	339	384
4	155	87	1200	608	1480	82	383	1620	668	248	341	387
5	82	86	1110	608	1270	83	292	1260	301	271	373	384
6	74	119	810	779	1080	301	549	600	192	246	396	373
7	543	256	468	896	1010	416	952	292	129	240	395	347
8	484	222	472	968	1030	257	1100	662	96	238	394	200
9	786	97	542	1030	1140	197	1350	383	85	265	346	116
10	1200	77	608	1090	1180	183	1230	210	77	288	184	113
11	854	77	678	1130	1180	194	624	205	72	288	94	113
12	268	103	687	1170	1180	254	350	573	69	287	240	150
13	157	154	681	1220	1160	288	462	1180	66	286	380	161
14	122	120	844	1270	1150	285	1270	1760	64	286	384	153
15	103	102	1010	1300	1050	308	1370	2560	63	205	388	153
16	102	93	1280	1310	772	316	823	2230	62	178	392	154
17	121	91	1180	1310	579	311	330	1780	60	288	392	154
18	117	85	894	1290	465	313	243	1540	89	297	391	155
19	113	233	935	1280	324	319	205	1410	134	297	381	155
20	114	376	994	1270	268	328	208	1360	138	297	391	155
21	113	629	1030	1290	261	529	215	1420	181	297	396	157
22	108	1050	1060	1380	259	435	205	1620	216	296	399	156
23	109	877	1100	1430	232	339	198	1800	164	296	398	157
24	141	550	1190	1320	216	343	192	2000	101	296	395	155
25	183	354	1420	1030	155	339	181	2100	98	296	388	155
26	106	296	1620	966	107	328	232	2200	97	296	321	156
27	97	676	1830	1050	103	362	263	2250	99	292	381	155
28	96	999	1770	1170	102	372	266	2400	195	291	395	155
29	95	1110	1600	1230	---	342	259	2550	238	291	390	154
30	124	595	937	1270	---	330	1400	2500	231	290	385	155
31	209	---	556	1280	---	328	---	2400	---	291	384	---
TOTAL	7150	9905	30764	33506	21873	8761	16513	52035	8258	8428	11030	6120
MEAN	231	330	992	1081	781	283	550	1679	275	272	356	204
MAX	1200	1110	1830	1430	1480	529	1400	3820	1900	297	399	387
MIN	74	77	468	476	102	82	181	205	60	178	94	113
CFSM	.88	1.26	3.79	4.13	2.98	1.08	2.10	6.41	1.05	1.04	1.36	.78
IN.	1.02	1.41	4.37	4.76	3.11	1.24	2.34	7.39	1.17	1.20	1.57	.87

CAL YR 1982 TOTAL 174026 MEAN 477 MAX 2900 MIN 58 CFSM 1.82 IN 24.71
WTR YR 1983 TOTAL 214343 MEAN 587 MAX 3820 MIN 60 CFSM 2.24 IN 30.43

03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat 38°21'45", long 86°49'43", in NW¼NW¼ sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on downstream side of right pier of bridge on County Road 125 South, 0.7 mile upstream from Grassy Fork, 3.3 miles north of St. Anthony, and at mile 4.1.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 459.22 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair, except for periods of extreme low flow which are poor.

AVERAGE DISCHARGE.--13 years, 34.3 ft³/s, 21.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s July 26, 1979, gage height, 15.30 ft from contracted-opening and flow-over-the road measurements at gage height of 15.30 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 9	1200	1050	10.60	Apr. 14	0500	1210	10.79
Dec. 25	1800	1280	10.88	Apr. 30	1000	*3280	*11.99
Dec. 27	1600	1120	10.68	May 3	0600	1370	10.99
Apr. 8	1100	1460	11.06	May 13	0800	2120	11.48

Minimum daily discharge, 0.01 ft³/s July 30, 31, Aug. 5-16, 19-27, Sept. 1-10, 16-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.1	63	25	28	4.5	19	1170	7.0	.56	.09	.01
2	2.6	2.2	42	21	296	4.0	115	173	23	.51	.12	.01
3	2.5	3.5	107	17	85	3.7	73	605	130	.56	.06	.01
4	2.4	2.3	141	15	44	3.6	44	108	38	1.2	.05	.01
5	2.2	2.1	150	14	32	6.5	36	50	21	1.6	.01	.01
6	2.1	2.0	74	13	30	133	97	31	11	.50	.01	.01
7	35	1.8	43	12	25	59	144	71	7.8	.39	.01	.01
8	22	1.7	30	10	20	32	596	109	5.6	.30	.01	.01
9	314	1.7	23	9.7	19	23	207	40	4.0	.30	.01	.01
10	58	1.7	20	10	18	20	91	26	3.0	.27	.01	.01
11	26	1.7	18	9.1	16	17	62	21	2.3	.24	.01	9.4
12	18	18	14	7.7	13	15	41	22	1.9	.24	.01	21
13	13	6.7	11	7.1	12	13	168	654	1.5	.18	.01	1.6
14	9.8	4.4	11	7.1	12	12	524	680	1.3	.18	.01	.30
15	7.5	4.2	255	6.1	11	11	79	431	1.3	.18	.01	.09
16	5.1	3.2	136	6.8	11	10	45	97	1.1	.18	.01	.01
17	3.8	3.0	54	5.3	9.5	9.1	32	49	1.0	.15	.04	.01
18	3.1	3.0	37	6.7	8.6	11	26	35	.95	1.0	.11	.01
19	2.6	3.0	31	5.5	8.3	10	20	32	.95	.24	.01	.01
20	5.1	10	23	4.4	7.3	28	16	26	1.8	.15	.01	.01
21	3.4	115	19	81	6.7	62	14	41	.85	.15	.01	.01
22	2.5	115	17	227	7.0	29	13	102	.71	.15	.01	.01
23	2.3	98	144	95	7.2	21	12	35	.70	.12	.01	.01
24	2.3	54	106	61	6.5	18	12	26	.63	.12	.01	.01
25	2.3	31	557	42	5.2	15	9.6	19	.57	.18	.01	.01
26	2.3	70	154	31	4.4	15	8.2	16	.51	.15	.01	.01
27	2.3	152	626	24	4.4	29	7.3	13	.59	.12	.01	.01
28	2.3	314	252	20	4.6	19	9.2	12	2.5	.09	.70	.01
29	2.3	77	76	18	---	15	27	27	2.5	.03	.30	.01
30	2.2	44	45	25	---	14	1240	16	.69	.01	.06	.01
31	2.2	---	33	18	---	14	---	8.0	---	.01	.03	---
TOTAL	564.0	1148.3	3312	854.5	751.7	676.4	3787.3	4745.0	274.75	10.06	1.77	32.64
MEAN	18.2	38.3	107	27.6	26.8	21.8	126	153	9.16	.32	.057	1.09
MAX	314	314	626	227	296	133	1240	1170	130	1.6	.70	21
MIN	2.1	1.7	11	4.4	4.4	3.6	7.3	8.0	.51	.01	.01	.01
CFSM	.84	1.76	4.91	1.27	1.23	1.00	5.78	7.02	.42	.02	.003	.05
IN.	.96	1.96	5.65	1.46	1.28	1.15	6.46	8.10	.47	.02	.00	.06

CAL YR 1982 TOTAL 16420.00 MEAN 45.0 MAX 1110 MIN .30 CFSM 2.06 IN 28.02
WTR YR 1983 TOTAL 16158.42 MEAN 44.3 MAX 1240 MIN .01 CFSM 2.03 IN 27.57

03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN

LOCATION.--Lat 38°17'50", long 87°15'39", in SE¼NE¼ sec.35, T.2 S., R.8 W., Pike County, Hydrologic Unit 05120209, on right bank at downstream side of bridge on State Highway 61, 0.5 mile north of Enos Corner, 3.1 miles north of Spurgeon, and at mile 8.0.

DRAINAGE AREA.--42.8 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-75-1: 1965-74(P).

GAGE.--Water-stage recorder. Datum of gage is 420.88 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--19 years, 51.9 ft^3/s, 16.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft^3/s June 9, 1979, gage height, 15.07 ft, from rating curve extended above 3,300 ft^3/s on basis of contracted-opening and flow over-the-road measurements at gage height of 15.07 ft; no flow Jan. 20-31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 13.09 ft, from floodmarks, discharge, 4,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 9	1200	1300	9.85	Apr. 30	1000	2760	12.15
Dec. 25	1600	1440	10.20	May 1	1400	*3400	*12.81
Mar. 6	0400	1590	10.50	May 3	0500	1630	10.59
Apr. 8	1000	1000	8.62	May 14	1500	2040	11.27
Apr. 9	0600	2690	12.08	June 3	1000	2600	11.97

Minimum daily discharge, 5.5 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	193	67	47	15	64	1860	54	40	31	11
2	11	12	97	59	247	14	185	486	52	34	23	11
3	11	15	464	51	106	13	122	874	903	37	21	11
4	12	11	358	45	51	13	62	270	200	38	20	11
5	11	9.6	177	43	40	76	82	203	117	34	19	10
6	9.6	9.2	102	42	41	662	246	172	97	31	18	9.6
7	74	10	58	40	37	147	243	190	82	29	17	9.2
8	23	12	45	37	32	84	503	214	65	28	17	8.8
9	390	9.2	37	37	32	58	1060	152	55	26	16	8.3
10	102	9.2	34	38	31	51	225	131	48	26	15	8.3
11	40	11	36	33	28	43	153	121	45	26	15	10
12	29	43	29	29	23	39	121	194	41	23	15	92
13	24	21	26	28	23	37	283	191	40	23	15	15
14	20	15	24	29	23	34	563	822	37	23	14	9.2
15	19	13	194	27	21	32	164	443	48	23	14	7.9
16	16	12	145	25	21	30	125	197	37	23	14	7.6
17	14	11	61	24	20	29	112	143	32	29	13	7.2
18	14	13	47	26	19	40	104	135	32	23	13	7.2
19	12	14	42	29	23	41	86	164	32	19	13	7.2
20	16	26	34	32	20	122	74	122	31	18	13	7.6
21	14	250	27	130	17	145	65	113	26	17	12	7.9
22	13	251	27	251	17	59	62	210	25	17	12	7.2
23	12	133	116	136	18	42	62	124	23	16	12	7.2
24	12	64	147	94	17	36	58	98	23	61	11	6.8
25	12	38	825	62	16	31	51	88	21	32	11	6.8
26	11	90	248	46	15	36	47	76	21	23	10	6.8
27	11	204	441	37	14	102	45	67	20	18	10	6.8
28	10	301	413	33	14	55	58	82	64	18	67	6.2
29	10	115	145	34	---	40	178	84	86	17	15	5.8
30	11	56	102	52	---	39	1500	64	56	17	14	5.5
31	12	---	88	36	---	40	---	58	---	17	12	---
TOTAL	986.6	1789.2	4782	1652	1013	2205	6703	8148	2413	806	522	336.1
MEAN	31.8	59.6	154	53.3	36.2	71.1	223	263	80.4	26.0	16.8	11.2
MAX	390	301	825	251	247	662	1500	1860	903	61	67	92
MIN	9.6	9.2	24	24	14	13	45	58	20	16	10	5.5
CFSM	.74	1.39	3.60	1.25	.85	1.66	5.21	6.15	1.88	.61	.39	.26
IN.	.86	1.56	4.16	1.44	.88	1.92	5.83	7.08	2.10	.70	.45	.29

CAL YR 1982 TOTAL 26021.8 MEAN 71.3 MAX 1730 MIN 5.6 CFSM 1.67 IN 22.62
WTR YR 1983 TOTAL 31355.9 MEAN 85.9 MAX 1860 MIN 5.5 CFSM 2.01 IN 27.25

03376500 PATOKA RIVER NEAR PRINCETON, IN

LOCATION.--Lat 38°23'30", long 87°32'55", in Location 107, T.1 S., R.10 W., Gibson County, Hydrologic Unit 05120209, on left bank 75 ft upstream from dam of Princeton Water and Lighting Co., 0.1 mile downstream from bridge on State Highway 65, 0.6 mile downstream from Indian Creek, 2 miles northeast of Princeton, and at mile 21.5.

DRAINAGE AREA.--822 mi^2.

PERIOD OF RECORD.--August 1934 to current year. Published as "at Patoka" August 1934 to September 1940. Records published for both sites October 1939 to September 1940 (monthly discharge only at present site, for October, November 1939, published in WSP 1305).

REVISED RECORDS.--WSP 1275: 1952. WSP 1335: 1935-36, 1938-39, 1949(M), 1940-50. WSP 1385: 1951-52. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 394.14 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). See WSP 1725 for history of changes prior to Jan. 21, 1941.

REMARKS.--Records fair. Flow regulated by Patoka Lake (See sta 03374498).

AVERAGE DISCHARGE.--49 years, 1,030 ft^3/s, 17.02 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft^3/s Jan. 26, 1937, gage height, 26.80 ft, site and datum then in use; no flow Aug. 29 to Sept. 12, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,100 ft^3/s May 6, gage height, 19.89 ft; minimum daily, 123 ft^3/s Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	138	2490	4600	2320	259	889	4380	2820	1900	345	388
2	153	221	2550	4800	2490	237	1150	6300	2670	1300	384	380
3	138	289	2990	4830	2500	221	1410	8990	3240	960	400	374
4	138	241	3540	4720	2490	209	1520	10300	3430	700	374	372
5	191	180	3740	4490	2510	209	1640	11500	3480	570	358	374
6	225	153	3910	4140	2510	1490	2000	12000	3520	470	378	374
7	784	138	3880	3760	2500	1790	2210	11800	3540	370	382	372
8	1190	135	3780	3400	2490	1950	2510	10800	3520	330	394	361
9	1440	209	3630	3010	2470	2070	2750	9840	3440	304	394	348
10	1710	309	3500	2670	2450	2100	2970	8600	3350	320	394	250
11	1880	245	3340	2380	2420	2000	3230	7270	2970	335	382	150
12	2040	241	3110	2110	2370	1740	3490	6170	2580	345	278	250
13	2110	396	2860	1880	2290	1310	3780	5330	2070	345	123	350
14	2130	420	2610	1710	2200	922	4640	5230	1320	340	160	284
15	2080	400	2390	1580	2100	746	4850	5310	795	335	350	217
16	1910	315	2240	1510	1990	651	4970	5090	594	320	374	156
17	1500	245	2120	1460	1880	597	4850	4910	502	245	408	138
18	859	209	2090	1430	1760	614	4640	4770	516	209	398	135
19	469	194	2070	1400	1610	662	4400	4760	518	269	396	135
20	325	194	2060	1390	1390	748	4170	4790	520	340	388	132
21	279	759	2050	1470	1110	1220	3930	4860	556	335	384	132
22	241	1410	2040	1750	836	1300	3610	5380	591	330	402	132
23	225	1530	2030	1900	657	1360	3260	5410	668	320	492	132
24	202	1700	2040	2050	578	1350	2830	5070	714	330	406	132
25	187	1820	3300	2160	516	1210	2400	4640	772	369	396	132
26	184	1910	3580	2220	452	980	1870	4200	808	350	392	129
27	225	2060	3620	2250	392	1080	1180	3830	876	335	382	132
28	217	2320	3930	2280	325	1260	761	3580	1190	320	521	132
29	170	2370	4110	2300	---	1250	918	3370	1330	315	501	132
30	147	2420	4240	2340	---	1160	2980	3080	1650	304	442	132
31	135	---	4410	2330	---	993	---	2950	---	299	404	---
TOTAL	23664	23171	94250	80320	49606	33688	85808	194510	54550	13914	11782	6857
MEAN	763	772	3040	2591	1772	1087	2860	6275	1818	449	380	229
MAX	2130	2420	4410	4830	2510	2100	4970	12000	3540	1900	521	388
MIN	135	135	2030	1390	325	209	761	2950	502	209	123	129
CFSM	.87	.88	3.45	2.94	2.01	1.23	3.24	7.12	2.06	.51	.43	.26
IN.	1.00	.98	3.98	3.39	2.09	1.42	3.62	8.20	2.30	.59	.50	.29

CAL YR 1982 TOTAL 551813 MEAN 1512 MAX 8250 MIN 63 CFSM 1.71 IN 23.27
WTR YR 1983 TOTAL 672120 MEAN 1841 MAX 12000 MIN 123 CFSM 2.09 IN 28.35

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE¼NW¼ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mile downstream from Patoka River, and at mile 94.4.

DRAINAGE AREA.--28,635 mi^2.

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1949, to Feb. 8, 1977, at datum 2.00 ft higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--56 years, 27,440 ft^3/s, 13.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 305,000 ft^3/s May 25, 1943; maximum gage height, 30.62 ft Feb. 5, 6, 1969, present datum; minimum daily discharge, 1,650 ft^3/s Sept. 27, 28, 1941.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--(1874-78, 1884 to 1983) Maximum discharge, 428,000 ft^3/s Mar. 30, 1913, from rating curve extended above 310,000 ft^3/s, gage height, 33.0 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 172,000 ft^3/s May 10, gage height, 29.20 ft; minimum daily, 3,810 ft^3/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6170	6480	37100	130000	26200	16000	34400	57400	32000	17600	6450	5380
2	6160	6450	37800	130000	28600	15200	35600	77200	29000	20400	6960	5570
3	5820	6610	42200	128000	38000	14500	40600	91500	31100	24800	8260	5420
4	5550	6930	60200	122000	45500	14100	46300	108000	40400	27100	9040	5170
5	5400	8840	70800	111000	50600	13700	50700	125000	45500	25300	7920	4990
6	5310	12800	77900	95300	52600	17400	55000	139000	45400	22600	7150	4840
7	5500	14300	82600	76600	50100	24100	60000	151000	45600	21000	6720	4600
8	6880	13600	85300	61000	45700	24000	63500	160000	46000	18800	6350	4490
9	10800	12200	85700	50300	41200	22900	67300	168000	44100	17400	6090	4410
10	13500	11000	84400	43500	36200	21900	70500	171000	41400	16200	6000	4390
11	14200	10100	79900	38500	32200	21100	72700	165000	37300	15100	5830	4380
12	13700	9600	70100	34600	29500	20200	73100	151000	30300	14100	5580	5130
13	12600	9500	61400	31600	27300	19100	73100	135000	25500	13100	5330	5060
14	11700	9510	54100	29400	25500	17800	77900	122000	22400	12100	5170	4540
15	11100	9740	46300	27900	24200	16800	83400	111000	20100	11200	5340	4370
16	10400	10100	40400	26800	23000	15900	87900	101000	18600	10400	5540	4450
17	9530	10600	37700	25700	22100	15000	91200	93000	18000	9770	5630	4540
18	8510	10700	36900	24800	21500	14500	94100	84500	17800	9160	5870	4500
19	7490	10100	37200	24100	21000	14600	95100	76800	17200	8660	5670	4220
20	6990	9800	37700	23400	20500	15700	93600	69900	17600	8360	5680	4100
21	6740	9910	37800	22800	19900	22100	89200	64900	18400	8040	5610	4000
22	7450	12100	36600	22800	19500	30500	81900	62400	18100	7720	5700	3960
23	8400	14600	34500	24300	19300	34500	72000	61000	19200	7470	6030	3960
24	8030	17800	33300	26800	18900	35400	62400	58300	18700	7440	5440	4010
25	7610	20600	47900	29600	18400	33000	52500	54700	17200	7540	5200	4030
26	7310	22400	67700	30800	17900	28800	43600	50900	15700	7270	5300	4020
27	7230	22900	77700	30300	17200	28000	37000	46900	14700	6990	5140	3980
28	7390	25400	88000	29000	16600	30100	32700	43100	14100	6810	5160	3930
29	7330	30100	99400	27700	---	31000	30700	41500	14500	6640	5410	3880
30	7010	34100	114000	27400	---	32500	38200	39600	17300	6440	5360	3810
31	6740	---	125000	27100	---	34100	---	36100	---	6340	5380	---
TOTAL	258550	408870	1927600	1533100	809200	694500	1906200	2916700	793200	401850	186310	134130
MEAN	8340	13630	62180	49450	28900	22400	63540	94090	26440	12960	6010	4471
MAX	14200	34100	125000	130000	52600	35400	95100	171000	46000	27100	9040	5570
MIN	5310	6450	33300	22800	16600	13700	30700	36100	14100	6340	5140	3810
CFSM	.29	.48	2.17	1.73	1.01	.78	2.22	3.29	.92	.45	.21	.16
IN.	.34	.53	2.50	1.99	1.05	.90	2.48	3.79	1.03	.52	.24	.17

CAL YR 1982 TOTAL 15150720 MEAN 41510 MAX 154000 MIN 5310 CFSM 1.45 IN 19.68
WTR YR 1983 TOTAL 11970210 MEAN 32800 MAX 171000 MIN 3810 CFSM 1.15 IN 15.55

03378500 WABASH RIVER AT NEW HARMONY, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", in SE¼SE¼ sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 460 at New Harmony, at Indiana-Illinois State Line, and at mile 51.5 (82.9 km).

DRAINAGE AREA.--29,234 mi² (75,716 km²). Flood of March 1913 reached a stage of 27.7 ft (8.44 m). Flood of Jan. 31, 1937, reached a stage of 24.4 ft (7.44 m).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES: October 1974 to current year.
WATER TEMPERATURE: October 1974 to September 1980.
SEDIMENT DISCHARGE: October 1974 to current year.
WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500). Code 80010-U.S. Geological Survey; code 17002-Illinois Environmental Protection Agency.

EXTREMES FOR PERIOD OF RECORD.--
WATER DISCHARGE: Maximum, 339,000 ft³/s (9,600 m³/s) May 26, 1943, gage height, 23.84 ft (7.266 m); minimum daily discharge, 1,800 ft³/s (51.0 m³/s) Sept. 29, 30, 1941.
SPECIFIC CONDUCTANCE: Maximum conductance, 805 micromhos Feb. 15, 1977; minimum, 200 micromhos Mar. 3, 1979.
WATER TEMPERATURE: Maximum, 32.0°C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE, AIR (DEG C)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
DEC												
16...	1130	39700	527	7.5	5.4	5.0	40	--	757	--	--	350
MAR												
15...	1200	16800	574	8.3	17.0	9.5	18	13.4	767	--	--	K42
MAY												
24...	1100	--	418	7.4	21.0	19.0	19	7.6	--	27	550	--
24...	1200	58300	418	7.4	20.0	19.2	64	7.6	773	--	--	1340
AUG												
17...	1120	5630	510	8.1	34.0	27.5	--	9.5	775	--	--	--

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARBONATE (MG/L AS CACO3)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
DEC												
16...	876	230	64	--	--	60	--	19	--	12	10	.4
MAR												
15...	K60	260	76	--	--	64	--	24	--	20	14	.6
MAY												
24...	--	210	77	.00	58	55	19	17	8.9	9.8	9	.3
24...	1940	200	63	--	--	53	--	16	--	8.8	9	.3
AUG												
17...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
DEC												
16...	--	2.9	165	63	24	--	.20	16	329	298	.45	35300
MAR												
15...	--	2.2	183	83	30	--	.20	3.1	360	337	.49	16300
MAY												
24...	3.0	2.7	131	49	15	.1	--	--	--	--	--	--
24...	--	2.7	136	53	16	--	.20	7.0	289	240	.39	--
AUG												
17...	--	--	--	--	--	--	--	--	--	--	--	--

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	AMMONIA UN-IONIZED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
16...	--	--	--	4.0	--	.130	.17	.70	.240	.74	.130	.130
MAR												
15...	--	--	--	2.3	--	.010	.01	.70	.140	.43	.030	.020
MAY												
24...	120	20	2.6	--	<.100	--	--	1.20	.180	--	.050	--
24...	--	--	--	2.7	--	.030	.04	1.10	.200	.61	.140	.060
AUG												
17...	--	--	--	<.10	--	<.010	--	.30	.040	.12	.040	.020

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
DEC											
16...	.40	260	--	1	--	83	--	<1	--	--	--
MAR											
15...	.06	50	--	1	--	61	--	<1	--	--	--
MAY											
24...	--	--	3	--	71	44	<1	<1	48	28	<3
24...	.18	250	--	1	--	64	--	<.5	--	--	--
AUG											
17...	.06	--	--	--	--	--	--	--	--	--	--

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
DEC											
16...	<1	--	<1	--	<3	--	--	--	1100	--	--
MAR											
15...	<1	--	<1	--	<3	--	7	--	38	--	4
MAY											
24...	<3	6	<5	<5	<5	43	11	3903	71	<50	<50
24...	<1	--	<1	--	<3	--	20	--	510	--	7
AUG											
17...	--	--	--	--	--	--	--	--	--	--	--

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)
DEC											
16...	<4	--	44	.9	<10	--	--	--	--	<1	--
MAR											
15...	<4	--	11	4.6	10	--	2	<1	--	1	--
MAY											
24...	--	230	8	--	--	23	9	--	<3	<3	141
24...	<4	--	46	<.1	10	--	3	<1	--	<1	--
AUG											
17...	--	--	--	--	--	--	--	--	--	--	--

DATE	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, TOTAL (UG/L AS V)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC											
16...	190	--	<6.0	--	13	--	--	--	--	--	--
MAR											
15...	230	--	<6.0	--	6	--	--	--	51	2310	--
MAY											
24...	135	8.0	<5.0	<100	<50	<.01	<5	0	--	--	--
24...	150	--	<6.0	--	<3	--	--	--	159	25000	95
AUG											
17...	--	--	--	--	--	--	--	--	49	745	98

03378550 BIG CREEK NEAR WADESVILLE, IN

LOCATION.--Lat 38°04'58", long 87°46'10", in SW¼SW¼ sec.16, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, on left bank at downstream side of bridge on State Highway 66, 0.6 mile northwest of Blairsville, and 1.6 miles southeast of Wadesville.

DRAINAGE AREA.--104 mi^2.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 117 ft^3/s, 15.28 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,880 ft^3/s May 1, 1983; maximum gage height, 19.72 ft Apr. 24, 1975; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 4	0300	5290	18.29	May 1	1400	*7880	*19.07
Dec. 25	1900	6880	18.80	May 14	1800	3630	17.59
Apr. 8	1100	3240	17.38	May 22	0400	2910	17.16
Apr. 14	0500	3740	17.64				

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.4	421	83	118	24	201	5870	28	17	.84	.00
2	1.9	3.3	251	77	710	23	684	1600	25	10	.79	.00
3	1.7	6.4	2150	68	241	22	400	3090	1130	8.5	.69	.00
4	1.5	4.5	4120	61	97	22	150	611	346	14	.61	.00
5	1.3	3.1	1250	58	73	33	156	184	92	8.3	.61	.00
6	1.1	2.8	344	57	71	886	1070	120	59	5.4	.46	.00
7	70	2.6	149	56	64	197	1120	95	42	4.3	.42	.00
8	12	2.4	103	48	53	101	2040	145	33	3.9	.38	.00
9	493	2.4	80	48	54	69	766	77	27	3.5	.31	.00
10	190	2.2	73	49	55	59	240	63	23	3.2	.27	.00
11	36	2.0	71	45	56	51	151	55	20	3.0	.23	.00
12	19	26	58	39	50	46	111	61	18	3.0	.15	.00
13	14	23	46	37	47	44	995	94	16	2.8	.12	.00
14	10	7.5	44	38	48	42	2780	1910	14	2.5	.04	.00
15	8.3	4.8	282	35	44	36	402	2650	14	2.4	.00	.00
16	6.0	3.8	494	32	43	33	147	317	12	2.1	.00	.00
17	4.3	3.6	143	30	39	31	105	136	11	1.9	.00	.00
18	3.7	4.1	108	28	36	43	111	101	11	2.8	.00	.00
19	3.6	4.0	90	27	37	43	87	117	12	2.8	.00	.00
20	5.8	4.5	72	26	33	136	69	78	11	2.2	.00	.00
21	6.5	155	58	123	31	368	60	93	8.5	1.7	.00	.00
22	4.4	473	54	638	32	102	54	1770	7.1	1.5	.00	.00
23	3.6	230	201	296	32	71	53	281	6.7	1.4	.00	.00
24	3.7	133	421	198	30	60	48	102	6.5	1.2	.00	.00
25	3.7	64	4300	133	26	50	39	72	6.5	1.6	.00	.00
26	3.3	74	3560	111	23	49	36	52	6.0	1.4	.00	.00
27	2.9	577	1610	91	23	523	33	42	6.2	1.1	.00	.00
28	2.8	1120	1010	78	24	208	35	91	14	1.1	.00	.00
29	2.6	298	227	85	---	93	571	77	21	.97	.00	.00
30	2.6	131	127	206	---	80	4610	42	90	.94	.00	.00
31	2.4	---	97	105	---	86	---	34	---	.91	.00	---
TOTAL	923.8	3370.4	22014	3006	2190	3631	17324	20030	2116.5	117.42	5.92	.00
MEAN	29.8	112	710	97.0	78.2	117	577	646	70.6	3.79	.19	.000
MAX	493	1120	4300	638	710	886	4610	5870	1130	17	.84	.00
MIN	1.1	2.0	44	26	23	22	33	34	6.0	.91	.00	.00
CFSM	.29	1.08	6.83	.93	.75	1.13	5.55	6.21	.68	.04	.002	.000
IN.	.33	1.21	7.87	1.08	.78	1.30	6.20	7.16	.76	.04	.00	.00

CAL YR 1982 TOTAL 71632.78 MEAN 196 MAX 6440 MIN .75 CFSM 1.89 IN 25.62
WTR YR 1983 TOTAL 74729.04 MEAN 205 MAX 5870 MIN .00 CFSM 1.97 IN 26.73

04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART , IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW¼NW¼ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Center Street in Hobart, 300 ft upstream from Duck Creek, and 400 ft downstream from Lake George Dam.

DRAINAGE AREA.--124 mi².

PERIOD OF RECORD.--April 1947 to current year.

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 29, 1952, nonrecording gage, and July 30, 1952, to July 20, 1955, water-stage recorder at site 400 ft upstream at datum 11.80 ft higher.

REMARKS.--Records good. Flow occasionally regulated by Lake George Dam.

AVERAGE DISCHARGE.--36 years, 108 ft³/s, 11.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s June 14, 1981; maximum gage height, 19.48 ft, Oct. 11, 1954, present datum, site then in use; no flow Nov. 5, 1978, due to regulation of Lake George Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0600	1910	13.03	Apr. 3	0900	1370	11.15
Feb. 3	2300	752	8.79	May 2	1900	1720	12.44
Mar. 29	0200	733	8.70	July 2	2100	*3710	*16.74

Minimum daily discharge 11.0 ft³/s Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	28	204	149	112	79	269	649	81	49	52	14
2	13	95	181	126	202	75	649	1520	74	2220	38	13
3	12	135	1090	112	655	73	1320	1360	70	2670	31	13
4	13	84	1800	97	659	69	1000	879	71	1280	27	13
5	13	55	1360	88	436	67	715	652	65	701	25	13
6	16	40	1010	83	305	68	566	524	65	440	24	12
7	24	35	770	80	229	78	478	444	63	294	22	11
8	25	30	599	76	169	99	405	451	59	219	21	12
9	22	28	478	71	145	102	386	397	54	170	20	12
10	29	30	386	75	127	92	473	306	50	138	19	12
11	27	53	316	78	113	92	442	238	46	122	19	15
12	24	130	258	77	98	92	351	193	42	110	18	14
13	19	148	204	71	91	96	318	156	38	95	18	13
14	19	102	162	69	89	93	551	181	36	79	18	13
15	14	75	140	68	102	86	670	204	38	71	18	14
16	14	60	131	63	130	79	512	178	36	62	18	20
17	14	51	85	61	150	74	368	146	33	53	55	18
18	15	45	89	57	155	84	288	125	30	50	74	23
19	15	47	95	56	150	188	232	146	28	54	46	44
20	28	111	90	54	147	259	194	187	29	75	32	69
21	20	206	82	54	135	221	167	167	35	64	25	100
22	22	184	75	58	121	185	125	151	32	50	18	72
23	19	156	74	71	108	170	112	149	32	42	17	44
24	19	174	78	82	98	164	117	131	31	35	16	31
25	19	152	238	87	93	163	110	110	31	33	15	25
26	18	118	564	89	89	155	103	97	30	29	17	25
27	16	99	478	85	85	213	92	87	31	27	21	24
28	16	128	382	78	82	544	102	84	33	25	21	21
29	17	251	334	76	---	695	114	89	34	23	19	18
30	15	267	248	97	---	515	285	93	34	24	16	17
31	16	---	185	122	---	353	---	88	---	51	14	---
TOTAL	565	3117	12186	2510	5075	5323	11514	10182	1331	9355	794	745
MEAN	18.2	104	393	81.0	181	172	384	328	44.4	302	25.6	24.8
MAX	29	267	1800	149	659	695	1320	1520	81	2670	74	100
MIN	12	28	74	54	82	67	92	84	28	23	14	11
CFSM	.15	.84	3.17	.65	1.45	1.39	3.10	2.65	.36	2.44	.21	.20
IN.	.17	.94	3.66	.75	1.52	1.60	3.45	3.05	.40	2.81	.24	.22

CAL YR 1982 TOTAL 58606 MEAN 161 MAX 2300 MIN 11 CFSM 1.30 IN 17.58
WTR YR 1983 TOTAL 62697 MEAN 172 MAX 2670 MIN 11 CFSM 1.39 IN 18.81

STREAMS TRIBUTARY TO LAKE MICHIGAN

04093500 BURNS DITCH AT GARY, IN

LOCATION.--Lat 41°34'30", long 87°17'20", in SE¼NW¼ sec.13, T.36 N., R.8 W., Lake County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on Central Avenue, 0.4 mile east of Gary, and 0.4 mile downstream from confluence of Deep River and Little Calumet River.

DRAINAGE AREA.--160 mi². During times of floods flow may leave the basin by flowing west through Little Calumet River into the western portion of Calumet River basin; or during times of floods on Hart ditch, flow may enter the basin from western portion of the Little Calumet River basin.

PERIOD OF RECORD.--October 1943 to current year (Water years 1951-55, 1974-76, 1979-81, 1983, backwater free periods only).

REVISED RECORDS.--WSP 1034: 1944. WSP 1337: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 577.04 ft National Geodetic Vertical Datum of 1929. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good, except those for period of no gage-height record, which are fair. Burns ditch is an artificial channel which reverses the direction of flow of part of Little Calumet River and flows into Lake Michigan at Ogden Dunes. During high levels on Lake Michigan, only periods free from backwater are shown.

AVERAGE DISCHARGE.--28 years (1943-50, 1955-73, 1977, 1978, 1982), 140 ft³/s, 11.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s Oct. 11, 1954; maximum gage height, 16.44 ft Mar. 16, 1944, from graph based on gage readings.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,780 ft³/s July 3, gage height, 15.18 ft.

NOTE.--No gage-height record Nov. 11 to Jan. 2

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	65	335	255	159	117	439	630		---		---
2	30	172	310	195	288	110	733	1410		1320		---
3	27	193	1200	160	700	107	1430	1790		2640		---
4	23	141	2000	141	872	112	1490	1530		2440		---
5	25	92	1800	127	670	112	1150	1110		1680		---
6	28	65	1500	115	480	117	887	832		1060		---
7	43	55	1200	112	362	118	731	690		689		---
8	37	53	1000	110	290	140	619	678		466		---
9	39	53	820	106	231	154	575	569		360		---
10	55	50	700	109	205	196	607	444		291		---
11	41	110	550	120	180	183	611	351		238		---
12	33	209	450	113	152	141	528	293		---		---
13	30	221	365	106	131	131	465	251		---		---
14	25	150	290	103	127	134	609	274		---		---
15	31	115	240	102	150	130	806	294		---		---
16	45	95	215	98	186	126	739	271		---		---
17	21	84	145	94	217	122	585	231		---		---
18	22	78	150	89	223	147	477	202		---		---
19	29	80	160	84	221	277	376	223		---		---
20	57	200	150	79	217	362	300	255		---		---
21	38	310	137	85	202	388	249	245		---		159
22	37	285	128	96	182	305	217	241		---		---
23	33	260	127	105	164	258	187	231		---		---
24	30	290	130	107	147	250	196	209		---		---
25	31	235	300	115	135	241	154	165		---		---
26	31	192	850	120	124	234	138	150		---		---
27	29	170	750	115	117	300	135	140		---		---
28	30	210	640	99	115	645	148	140		---		---
29	31	400	560	96	---	876	153	145		---		---
30	31	430	425	120	---	768	285	150		---		---
31	34	---	340	156	---	562	---	135		---		---
TOTAL	1027	5063	17967	3632	7247	7863	16019	14279		---		---
MEAN	33.1	169	580	117	259	254	534	461		---		---
MAX	57	430	2000	255	872	876	1490	1790		---		---
MIN	21	50	127	79	115	107	135	135		---		---
CFSM	.21	1.06	3.63	.73	1.62	1.59	3.34	2.88		---		---
IN.	.24	1.18	4.18	.84	1.68	1.83	3.72	3.32		---		---

CAL YR 1982 TOTAL 85465 MEAN 234 MAX 2700 MIN 18 CFSM 1.46 IN 19.87

04094000 LITTLE CALUMET RIVER AT PORTER, IN

LOCATION.--Lat 41°37'18", long 87°05'13", in NE¼NE¼ sec.34, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank at downstream end of county road bridge, 200 ft upstream from bridge on U.S. Highway 20, 0.8 mile northwest of Porter, and 4.5 miles upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi².

PERIOD OF RECORD.--May 1945 to current year.

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WDR IN-72-1: Drainage area. WDR IN-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft National Geodetic Vertical Datum of 1929. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 74.3 ft³/s, 15.24 in/yr.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s Oct. 10, 1954, gage height, 11.66 ft; minimum daily, 17 ft³/s Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	2000	1090	8.29	May 2	1300	*1300	*8.61
Apr. 3	0500	894	7.94	July 2	2400	1180	8.42

Minimum daily discharge, 29 ft³/s Sept. 10.

REVISIONS.--Revised daily discharges, in cubic feet per second, for September 15-30, 1982, are given below. These figures supersede those published in the 1982 report.

Sept. 15	37	Sept. 19	50	Sept. 23	50	Sept. 27.....	40
16	36	20	41	24	41	28.....	38
17	40	21	39	25	41	29.....	36
18	83	22	57	26	44	30.....	35

Month	Ft³/s-days	Maximum	Minimum	Mean	Per square mile	Runoff in inches
September 1982	1192	83	31	39.7	[illegible]	.67
Water year 1982	38,841	1500	31	106	[illegible]	21.83

04094000 LITTLE CALUMET RIVER AT PORTER, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	52	90	73	86	59	111	396	82	69	54	33
2	33	120	96	70	136	58	382	998	72	534	44	32
3	36	99	667	65	388	57	751	552	70	741	40	32
4	36	68	638	59	237	56	348	268	71	204	38	31
5	34	56	371	59	141	56	203	172	65	103	38	31
6	36	51	341	60	102	57	158	133	68	75	38	32
7	40	48	210	62	90	64	156	123	64	62	36	32
8	37	46	139	60	84	71	149	150	59	56	36	31
9	36	46	111	58	78	71	134	118	55	52	34	30
10	37	47	97	60	76	66	187	98	54	60	33	29
11	36	60	86	66	72	67	169	88	52	66	34	32
12	35	136	75	61	67	65	136	81	49	51	35	31
13	35	100	66	57	65	61	125	80	47	45	33	31
14	36	72	64	56	68	59	401	96	46	43	33	31
15	36	61	70	56	85	56	408	91	48	42	33	31
16	36	55	79	55	100	54	195	81	46	44	32	34
17	36	53	82	55	112	53	144	75	44	42	116	34
18	36	51	75	55	105	63	116	73	43	41	70	35
19	36	54	73	56	97	166	104	132	42	52	46	47
20	44	158	71	56	90	176	94	142	42	71	40	62
21	45	191	66	56	82	122	88	99	41	54	37	101
22	41	116	61	63	76	107	83	145	39	43	36	55
23	39	104	66	81	72	105	79	159	38	45	36	45
24	38	119	77	89	68	105	75	109	38	50	35	40
25	38	88	287	94	65	98	73	89	37	43	34	39
26	39	75	414	87	62	97	70	78	36	41	35	42
27	39	73	184	78	61	160	68	72	37	39	35	40
28	38	106	168	73	60	447	82	69	54	37	35	38
29	39	166	136	72	---	377	86	78	46	38	34	37
30	39	114	92	106	---	192	285	89	53	48	33	36
31	41	---	79	107	---	131	---	87	---	95	33	---
TOTAL	1160	2585	5131	2105	2825	3376	5460	5021	1538	2986	1246	1154
MEAN	37.4	86.2	166	67.9	101	109	182	162	51.3	96.3	40.2	38.5
MAX	45	191	667	107	388	447	751	998	82	741	116	101
MIN	33	46	61	55	60	53	68	69	36	37	32	29
CFSM	.57	1.30	2.51	1.03	1.53	1.65	2.75	2.45	.78	1.46	.61	.58
IN.	.65	1.45	2.88	1.18	1.59	1.90	3.07	2.82	.86	1.68	.70	.65

CAL YR 1982 TOTAL 38835 MEAN 106 MAX 1500 MIN 31 CFSM 1.60 IN 21.82
WTR YR 1983 TOTAL 34587 MEAN 94.8 MAX 998 MIN 29 CFSM 1.43 IN 19.44

04094500 SALT CREEK NEAR McCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft downstream from Conrail Railroad bridge, 1.2 miles north of McCool, and 1.5 miles upstream from Little Calumet River.

DRAINAGE AREA.--74.6 mi².

PERIOD OF RECORD.--May 1945 to current year.

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.10 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 25, 1955, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--38 years, 74.4 ft³/s, 13.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft³/s Oct. 11, 1954, gage height, 14.12 ft; minimum daily, 14 ft³/s Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	1400	660	5.91	May 2	unknown	1300	unknown
Apr. 3	0600	737	6.35	July 2	2100	*3120	*12.34

Minimum daily discharge, 34 ft³/s Oct. 2-5, Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	81	76	79	61	104	858	77	64	50	38
2	34	110	73	73	143	60	367	1100	73	1100	45	37
3	34	88	480	70	348	59	667	600	73	1820	45	36
4	34	64	641	68	273	59	401	350	76	673	44	35
5	34	52	443	67	111	58	226	230	73	393	44	34
6	35	48	338	67	86	59	160	182	72	218	41	36
7	39	46	225	68	80	64	153	168	68	131	39	38
8	39	45	122	67	73	70	141	234	64	100	39	36
9	38	46	98	66	70	73	143	160	60	81	38	35
10	44	45	89	92	68	68	178	122	58	69	39	35
11	40	56	82	70	66	70	159	103	56	68	41	37
12	38	125	76	67	63	68	135	91	52	64	42	37
13	37	86	70	65	60	66	150	85	51	59	40	35
14	38	66	68	63	61	64	308	120	49	57	38	35
15	38	56	69	61	72	63	346	106	52	59	36	35
16	37	53	76	61	82	60	201	84	50	57	35	39
17	36	51	76	60	88	59	141	73	47	54	65	39
18	38	49	72	59	84	67	120	69	46	54	76	37
19	36	50	70	59	80	200	110	143	46	57	58	52
20	41	140	69	60	76	143	100	201	45	70	51	77
21	43	140	66	60	70	105	95	124	45	55	45	106
22	39	92	64	64	68	100	90	127	44	51	42	66
23	39	85	66	78	67	97	85	132	43	49	42	53
24	38	94	70	80	65	94	80	92	42	48	42	48
25	39	78	233	80	64	93	77	81	40	45	40	46
26	38	69	376	75	63	92	74	76	39	44	39	48
27	37	69	225	72	63	162	72	73	39	44	39	46
28	36	86	167	68	61	315	86	73	70	42	39	46
29	35	142	129	68	---	308	90	79	63	42	38	46
30	36	96	92	93	---	163	415	80	58	58	38	45
31	36	---	81	90	---	114	---	78	---	72	38	---
TOTAL	1161	2271	4887	2167	2584	3134	5474	6094	1671	5798	1348	1333
MEAN	37.5	75.7	158	69.9	92.3	101	182	197	55.7	187	43.5	44.4
MAX	44	142	641	93	348	315	667	1100	77	1820	76	106
MIN	34	44	64	59	60	58	72	69	39	42	35	34
CFSM	.50	1.02	2.12	.94	1.24	1.35	2.44	2.64	.75	2.51	.58	.60
IN.	.58	1.13	2.44	1.08	1.29	1.56	2.73	3.04	.83	2.89	.67	.66

CAL YR 1982 TOTAL 38443 MEAN 105 MAX 1050 MIN 34 CFSM 1.41 IN 19.17
WTR YR 1983 TOTAL 37922 MEAN 104 MAX 1820 MIN 34 CFSM 1.39 IN 18.91

04095300 TRAIL CREEK AT MICHIGAN CITY, IN

LOCATION.--Lat 41°43'00", long 86°51'35", in SW¼NE¼ sec.27, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on left downstream wingwall of bridge on Springland Avenue in Michigan City, 1.0 mile upstream from Otter Creek, and 4.2 miles upstream from mouth.

DRAINAGE AREA.--54.1 mi².

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record which are fair.

AVERAGE DISCHARGE.--14 years, 72.4 ft³/s, 18.17 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s Mar. 4, 1979, gage height, 11.40 ft; minimum daily, 20 ft³/s Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 3	unknown	800	unknown	Apr. 14	1400	592	7.19
Dec. 25	1300	560	6.94	May 2	1100	*1050	*9.86
Apr. 2	2300	815	8.77				

Minimum daily discharge, 33 ft³/s Sept. 5, Oct. 1, 2, July 28, Aug. 10, 14-16, Sept. 10, 29, 30.

NOTE.--No gage-height record Oct. 1 to Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	72	90	80	80	63	103	262	92	65	46	37
2	33	110	130	78	172	61	542	851	78	210	39	36
3	37	90	540	72	236	60	549	500	72	92	38	35
4	35	75	380	63	119	60	212	220	73	65	37	34
5	34	62	230	61	91	60	146	145	68	52	36	35
6	36	50	265	61	86	61	134	130	72	46	36	52
7	38	46	200	63	84	86	171	120	67	45	35	37
8	36	45	140	63	80	94	145	140	59	43	35	35
9	34	44	99	62	79	82	136	115	57	43	34	34
10	35	50	94	64	77	78	173	97	55	43	33	33
11	35	87	89	67	73	75	155	91	54	41	34	38
12	34	130	81	65	66	70	123	86	52	38	35	37
13	34	100	72	59	65	66	145	82	52	38	34	36
14	34	80	69	58	68	65	501	95	49	37	33	36
15	35	63	77	58	92	64	246	93	50	35	33	36
16	35	59	88	58	114	61	147	85	48	35	33	39
17	35	56	91	57	137	59	127	81	47	35	145	40
18	35	54	83	56	114	81	112	79	46	34	54	43
19	35	80	80	53	103	186	102	148	45	36	43	62
20	39	130	80	55	93	127	95	119	45	51	41	89
21	44	165	73	56	84	111	92	92	44	40	40	93
22	42	130	66	66	79	107	88	121	42	36	39	44
23	40	95	66	85	77	106	86	126	41	43	39	40
24	38	105	80	89	72	106	83	91	41	51	39	37
25	38	90	396	89	71	99	82	79	41	39	38	35
26	38	75	248	82	68	98	79	72	41	37	38	36
27	39	74	134	74	67	211	75	68	41	35	38	36
28	40	88	161	69	66	412	101	66	66	33	38	35
29	41	150	117	68	---	206	98	88	49	54	38	33
30	42	118	92	115	---	131	318	98	71	64	37	33
31	48	---	83	97	---	110	---	112	---	61	37	---
TOTAL	1152	2573	4494	2143	2613	3256	5166	4552	1658	1577	1275	1246
MEAN	37.2	85.8	145	69.1	93.3	105	172	147	55.3	50.9	41.1	41.5
MAX	48	165	540	115	236	412	549	851	92	210	145	93
MIN	33	44	66	53	65	59	75	66	41	33	33	33
CFSM	.69	1.59	2.68	1.28	1.73	1.94	3.18	2.72	1.02	.94	.76	.77
IN.	.79	1.77	3.09	1.47	1.80	2.24	3.55	3.13	1.14	1.08	.88	.86

CAL YR 1982 TOTAL 33719 MEAN 92.4 MAX 1110 MIN 31 CFSM 1.71 IN 23.19
WTR YR 1983 TOTAL 31705 MEAN 86.9 MAX 851 MIN 33 CFSM 1.61 IN 21.80

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE¼NW¼ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 miles upstream from Indiana-Michigan State line, and 9.8 miles north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi^2 of which 2.30 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-80-1: 1970, 1971(P), 1972, 1973, 1974(P), 1975 (M), 1976 (P), and 1978 (P).

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 25.4 ft^3/s, 20.05 in./yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft^3/s Mar. 7, 1979, gage height, 7.02 ft; minimum daily, 6.7 ft^3/s Sept. 13, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 3	1300	227	5.71	Apr. 14	1200	161	4.98
Dec. 25	1700	137	4.66	May 2	0400	*290	*5.95
Apr. 2	1800	229	5.60				

Minimum daily discharge, 9.7 ft^3/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	26	33	29	27	21	38	69	29	21	14	11
2	14	65	37	27	44	20	145	192	25	29	12	11
3	13	42	159	25	54	19	123	72	25	25	12	11
4	13	28	104	23	36	18	61	49	27	20	12	10
5	13	24	78	23	33	18	46	40	24	17	11	10
6	14	21	70	23	28	18	44	37	27	16	11	10
7	17	20	46	23	28	32	55	41	25	16	11	10
8	15	19	37	22	27	35	43	49	22	16	11	10
9	15	19	35	22	26	26	46	35	21	15	11	9.9
10	16	19	33	23	25	23	57	31	20	14	11	9.7
11	15	27	31	24	24	22	50	28	19	14	11	10
12	15	49	24	22	23	21	40	26	18	13	11	11
13	14	32	22	21	22	20	51	25	18	13	11	11
14	14	24	21	22	24	19	128	27	18	12	11	10
15	14	21	25	22	29	19	67	27	18	12	11	10
16	13	21	32	22	31	21	45	24	17	13	11	11
17	13	20	31	21	35	28	39	23	16	13	21	11
18	14	20	27	21	32	30	35	22	16	12	18	12
19	14	22	26	21	29	48	33	44	15	13	13	19
20	18	83	26	20	27	36	31	37	15	15	12	21
21	17	63	24	19	24	36	29	28	15	14	11	28
22	16	41	23	23	23	34	28	41	15	13	11	16
23	16	43	24	30	22	33	27	46	14	12	11	14
24	17	44	29	29	21	37	27	31	14	17	11	13
25	19	34	97	29	21	38	25	27	14	13	11	12
26	18	31	64	26	20	37	25	25	13	12	11	13
27	19	31	41	25	21	62	24	24	14	11	11	12
28	18	42	49	24	23	92	30	23	20	11	11	11
29	17	48	37	24	---	58	29	28	18	12	11	11
30	17	35	30	36	---	44	87	30	20	16	11	10
31	17	---	30	30	---	39	---	35	---	16	11	---
TOTAL	479	1014	1345	751	779	1004	1508	1236	572	466	367	368.6
MEAN	15.5	33.8	43.4	24.2	27.8	32.4	50.3	39.9	19.1	15.0	11.8	12.3
MAX	19	83	159	36	54	92	145	192	29	29	21	28
MIN	13	19	21	19	20	18	24	22	13	11	11	9.7
CFSM	.90	1.97	2.52	1.41	1.62	1.88	2.92	2.32	1.11	.87	.69	.72
IN.	1.04	2.19	2.91	1.62	1.66	2.17	3.26	2.67	1.24	1.01	.79	.80

CAL YR 1982 TOTAL 10723.0 MEAN 29.4 MAX 336 MIN 10 CFSM 1.71 IN 23.19
WTR YR 1983 TOTAL 9889.6 MEAN 27.1 MAX 192 MIN 9.7 CFSM 1.58 IN 21.39

04097970 LIME LAKE OUTLET AT PANAMA, IN

LOCATION.--Lat 41°42'46", long 85°07'10", in NW¼NW¼ sec.35, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on right bank 10 ft downstream from dam for Lime Lake, 30 ft upstream from bridge on Orland Road, and 0.7 mile northwest of Panama.

DRAINAGE AREA.--17.5 mi², of which 3.68 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--14 years, 7.72 ft³/s, 5.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46 ft³/s Apr. 3, 1982, gage height, 4.85 ft; no flow at times during 1971 and 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33 ft³/s May 8, gage height, 4.46 ft; minimum daily, 0.44 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.8	20	23	12	10	2.9	23	2.2	11	2.9	1.1
2	3.2	10	20	22	13	9.9	4.5	30	2.6	11	2.6	1.0
3	2.9	11	22	22	13	9.8	13	30	3.3	15	2.4	1.0
4	2.7	10	24	22	13	9.8	23	31	3.6	17	4.2	.93
5	2.5	8.9	26	21	13	9.8	23	31	3.9	15	4.7	.89
6	2.5	7.9	26	20	13	10	23	31	5.5	13	4.6	.85
7	2.5	18	26	20	13	11	23	32	5.9	13	4.3	.79
8	2.3	23	26	19	13	11	23	33	6.0	12	3.9	.72
9	2.2	21	25	19	13	11	23	32	6.0	11	3.4	.69
10	2.2	18	25	19	12	11	24	31	6.2	12	3.1	.65
11	2.0	17	24	18	12	10	24	30	6.4	12	4.4	.61
12	1.8	17	23	17	12	10	24	29	6.8	5.9	3.9	.55
13	1.7	15	23	17	12	10	24	28	6.9	2.0	3.7	.50
14	1.6	15	22	16	11	9.8	27	27	6.8	2.1	3.4	.45
15	1.3	15	22	16	11	9.3	26	26	6.2	2.3	3.3	.44
16	1.2	15	23	15	11	6.2	25	25	6.0	2.4	3.1	.47
17	1.2	14	23	15	11	.61	25	24	5.5	2.3	3.3	.47
18	1.2	14	23	15	11	.53	24	23	5.0	2.4	3.3	.53
19	1.2	14	22	14	11	.55	23	22	4.5	2.6	3.2	.76
20	1.5	18	22	14	11	.51	23	22	4.3	2.5	3.0	1.1
21	1.2	19	21	13	11	.49	23	21	4.0	2.5	2.8	1.9
22	1.1	19	21	13	11	.49	22	23	3.8	3.0	2.4	1.7
23	1.1	19	21	13	11	.53	21	23	3.6	2.7	2.2	1.5
24	1.1	19	22	13	11	.55	21	22	3.3	2.4	2.0	1.5
25	1.1	19	24	13	10	.62	20	21	3.2	2.2	1.9	1.4
26	1.1	19	24	13	10	.74	19	20	3.0	2.0	1.8	10
27	1.2	19	25	13	10	.95	19	19	3.4	1.9	1.7	14
28	1.3	19	26	12	10	1.4	20	18	11	1.7	1.6	13
29	1.3	20	25	12	---	1.8	21	18	12	1.6	1.4	12
30	1.3	20	24	12	---	2.2	22	7.9	12	1.9	1.4	11
31	2.0	---	24	12	---	2.4	---	1.9	---	2.9	1.2	---
TOTAL	54.8	478.6	724	503	325	172.97	635.4	754.8	162.9	191.3	91.1	82.50
MEAN	1.77	16.0	23.4	16.2	11.6	5.58	21.2	24.3	5.43	6.17	2.94	2.75
MAX	3.3	23	26	23	13	11	27	33	12	17	4.7	14
MIN	1.1	4.8	20	12	10	.49	2.9	1.9	2.2	1.6	1.2	.44
CFSM	.10	.91	1.34	.93	.66	.32	1.21	1.39	.31	.35	.17	.16
IN.	.12	1.02	1.54	1.07	.69	.37	1.35	1.60	.35	.41	.19	.18

CAL YR 1982 TOTAL 4957.03 MEAN 13.6 MAX 44 MIN .35 CFSM .78 IN 10.54
WTR YR 1983 TOTAL 4176.37 MEAN 11.4 MAX 33 MIN .44 CFSM .65 IN 8.88

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MI

LOCATION.--41°48'03", long 85°45'22", in SW¼ sec.6, T.8 S., R.12 W., Michigan Meridian, St. Joseph County, Hydrologic Unit 04050001, on right bank 500 ft upstream from bridge on U.S. Highway 12 at Mottville, 0.4 mi. downstream from Michigan Power Co. hydroelectric plant, 4 mi upstream from Pigeon River, and at mile 96.

DRAINAGE AREA.--1,866 mi².

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1930, 1932, 1938, 1940-42, 1945. WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 755.3 ft Michigan Power Co. datum. Prior to Oct. 1, 1951, at site 0.4 mi upstream at datum 4.2 ft higher.

REMARKS.--Records good. Flow regulated by powerplants above station. National Weather Service gage-height telemark at station.

AVERAGE DISCHARGE.--60 years, 1,584 ft³/s, 11.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s Apr. 27, 1950, gage height, 10.76 ft, present datum; minimum daily, 39 ft³/s Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,430 ft³/s May 11, gage height, 6.99 ft; minimum daily, 557 ft³/s Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1210	1100	2280	3200	1730	2020	3050	3050	2870	1970	1530	843
2	1400	1210	2290	2910	1730	1960	3250	4100	2860	1930	1580	920
3	1330	1580	2570	2970	1960	1800	3350	4420	3000	2500	1310	557
4	1190	1570	2740	2780	1940	1870	3240	5040	2920	2170	1500	575
5	1140	1750	2900	2700	2000	1890	3360	5080	2780	2140	1540	658
6	904	1630	2990	2470	2020	1860	3320	5220	2830	1900	1320	1120
7	944	1680	3330	2430	1960	1880	3150	5190	2790	1810	1270	1030
8	1110	1780	3590	2450	1930	2010	3530	5040	2730	1650	1510	708
9	1010	1700	3350	2410	1930	2140	3440	4950	2660	1280	1150	872
10	736	1790	3460	2360	1880	2130	3770	4720	2410	1320	1140	573
11	1210	1890	3160	2350	1880	2200	3640	5080	2500	1500	1320	587
12	1140	1860	3030	2180	1800	2240	3490	4780	2410	1440	1120	897
13	1040	1840	2810	2330	1810	2190	4270	4370	2100	1280	888	580
14	960	1970	2720	2250	1530	1950	4320	4270	2230	1130	967	563
15	944	2160	2640	2240	1570	1930	4730	3950	1880	1340	1740	658
16	952	2100	2520	2160	1720	1930	4870	3610	1940	1020	1530	1020
17	952	1610	2490	1950	1780	1970	4960	3280	1890	787	1420	706
18	944	1920	2560	1940	1880	1810	4770	2900	1700	1360	1540	644
19	824	1830	2600	1790	1740	1920	4470	3020	1360	1420	1370	747
20	904	1860	2620	1660	1910	1990	4490	3000	1620	995	1170	1020
21	1110	2230	2590	1660	2000	2070	3910	3020	1900	888	836	1130
22	1370	2150	2570	1830	2110	1990	3820	3160	1340	917	689	1020
23	1050	2290	2490	1920	2140	2070	3870	3530	1190	933	996	1070
24	808	2220	2530	1920	2150	2210	3620	3390	1370	614	1160	1100
25	1280	2390	2630	1890	2170	2230	3280	3600	1240	1600	801	837
26	1280	2520	2670	1790	2230	2050	3110	3740	935	1400	903	1090
27	1120	2460	2940	1870	2160	2050	2750	3600	1400	1260	709	1280
28	872	2430	3240	1710	1990	2190	2730	3300	1390	1230	727	1090
29	896	2480	3290	1770	---	2510	2900	3100	1670	1170	1150	950
30	672	2460	3270	1790	---	3100	3010	3120	1840	913	868	940
31	640	---	3260	1860	---	3340	---	3300	---	1540	889	---
TOTAL	31942	58460	88130	67540	53650	65500	110470	121930	61755	43407	36643	25785
MEAN	1030	1949	2843	2179	1916	2113	3682	3933	2059	1400	1182	860
MAX	1400	2520	3590	3200	2230	3340	4960	5220	3000	2500	1740	1280
MIN	640	1100	2280	1660	1530	1800	2730	2900	935	614	689	557
CFSM	.55	1.04	1.52	1.17	1.03	1.13	1.97	2.11	1.10	.75	.63	.46
IN.	.64	1.17	1.76	1.35	1.07	1.31	2.20	2.43	1.23	.87	.73	.51

CAL YR 1982 TOTAL 872555 MEAN 2391 MAX 9950 MIN 640 CFSM 1.28 IN 17.39
WTR YR 1983 TOTAL 765212 MEAN 2096 MAX 5220 MIN 557 CFSM 1.12 IN 15.26

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW¼SE¼ sec.26, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on left bank 5 ft upstream from bridge on U.S. Highway 20, 1.3 miles downstream from outlet of Hogback Lake, 1.3 miles southeast of Flint, and 5.8 miles west of Angola.

DRAINAGE AREA.--106 mi², of which 22.5 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft National Geodetic Vertical Datum of 1929. Prior to October 1947, nonrecording gage at site 0.3 mile downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 miles upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, non-recording gage at same site and datum.

REMARKS.--Records good, except for period of Oct. 10 to Nov. 4 when the channel was being cleaned.

AVERAGE DISCHARGE.--38 years, 78.5 ft³/s, 10.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft³/s Mar. 22, 1982, gage height, 13.90 ft; minimum daily, 3.4 ft³/s Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 344 ft³/s May 6, gage height, 10.49 ft; minimum daily, 19 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	80	161	173	68	101	191	154	116	147	37	22
2	37	106	163	164	73	92	191	213	111	154	36	21
3	36	132	167	153	87	84	199	279	108	153	36	21
4	34	153	178	144	101	81	205	315	104	146	37	21
5	32	162	194	138	105	81	206	337	99	133	38	21
6	[illegible]	160	216	132	104	79	203	343	97	117	37	21
7	[illegible]	150	228	127	104	81	196	335	97	103	37	22
8	36	138	229	123	95	87	189	317	95	94	36	21
9	38	126	220	114	90	92	186	295	92	84	34	21
10	39	115	207	111	84	98	194	269	89	73	34	21
11	38	106	191	105	76	101	203	246	86	65	36	20
12	37	102	175	101	73	101	207	227	82	58	37	20
13	35	100	164	104	68	98	207	212	80	54	37	20
14	34	97	152	101	66	92	219	199	76	51	36	20
15	33	94	144	95	63	87	238	187	73	48	34	19
16	32	91	142	90	66	81	246	176	70	45	32	20
17	31	88	143	84	70	76	246	168	67	43	30	21
18	31	84	144	79	81	76	238	157	64	42	30	21
19	30	81	143	73	90	75	225	147	61	40	29	22
20	31	117	140	70	98	76	208	141	59	39	29	23
21	34	132	138	68	105	84	192	135	57	38	28	25
22	36	140	136	66	117	84	181	136	54	39	27	25
23	36	147	132	66	123	84	169	140	53	38	26	25
24	35	152	132	68	124	84	161	142	51	37	25	25
25	34	153	137	66	124	84	152	142	50	36	24	25
26	34	152	149	66	123	84	144	139	48	35	24	25
27	33	149	164	63	114	87	137	134	52	34	24	25
28	33	147	175	63	105	124	136	127	66	33	24	24
29	32	150	185	62	---	156	133	124	86	33	23	24
30	33	157	186	63	---	176	138	122	116	36	23	24
31	49	---	181	66	---	189	---	119	---	37	23	---
TOTAL	1075	3761	5216	2998	2597	2975	5740	6177	2359	2085	963	665
MEAN	34.7	125	168	96.7	92.8	96.0	191	199	78.6	67.3	31.1	22.2
MAX	49	162	229	173	124	189	246	343	116	154	38	25
MIN	30	80	132	62	63	75	133	119	48	33	23	19
CFSM	.33	1.18	1.59	.91	.88	.91	1.80	1.88	.74	.64	.29	.21
IN.	.38	1.32	1.83	1.05	.91	1.04	2.01	2.17	.83	.73	.34	.23

CAL YR 1982 TOTAL 50226 MEAN 138 MAX 794 MIN 25 CFSM 1.30 IN 17.63
WTR YR 1983 TOTAL 36611 MEAN 100 MAX 343 MIN 19 CFSM .94 IN 12.85

04099750 PIGEON RIVER NEAR SCOTT, IN

LOCATION.--Lat 41°44'56", long 85°34'35", in SE¼NW¼ sec.14, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001, on right bank 20 ft downstream from bridge on County Road 750 North, 1,200 ft downstream from Page ditch, 0.7 mile south of Indiana-Michigan State line, and 1.2 miles northwest of Scott.

DRAINAGE AREA.--361 mi², of which 53.9 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 362 ft³/s, 13.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s Mar. 21, 1982, gage height, 7.85 ft; minimum daily, 42 ft³/s Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft³/s May 3, gage height, 6.04 ft; minimum daily, 115 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	231	579	715	311	337	548	644	460	359	235	133
2	195	399	560	688	337	317	603	891	440	383	211	128
3	189	575	628	653	402	316	673	1220	428	410	195	126
4	186	540	753	607	399	313	711	1290	430	399	199	123
5	185	481	866	564	384	310	694	1250	412	381	205	124
6	182	485	955	535	384	311	699	1240	415	359	198	129
7	183	493	1020	514	378	337	731	1250	435	333	193	135
8	182	486	977	488	368	380	737	1310	405	308	183	129
9	181	476	933	465	357	372	725	1310	380	288	167	126
10	186	459	909	454	348	355	737	1220	364	292	159	123
11	192	446	873	452	334	343	769	1120	355	277	181	122
12	179	468	817	436	328	336	753	1010	342	252	196	121
13	171	469	749	417	309	330	765	912	327	234	186	119
14	167	444	690	404	302	325	882	831	314	223	182	118
15	164	409	657	394	306	317	994	773	302	216	182	115
16	161	385	670	378	312	307	999	714	283	201	146	120
17	158	366	688	365	324	298	950	620	279	197	140	127
18	154	350	643	350	333	306	929	581	271	207	173	129
19	144	338	604	340	339	329	906	567	263	205	173	145
20	153	397	588	335	351	322	869	574	255	195	167	155
21	168	494	566	330	363	336	820	541	249	188	159	170
22	163	501	539	321	376	340	764	572	236	193	151	173
23	156	503	523	335	384	334	707	621	226	192	149	162
24	153	528	526	336	384	330	656	591	220	187	143	155
25	152	539	595	326	376	323	604	544	210	178	138	149
26	152	516	670	320	366	319	558	519	206	173	139	148
27	152	507	710	312	357	347	522	494	207	164	141	147
28	151	516	732	304	338	455	490	472	321	159	141	146
29	151	562	769	300	---	527	505	475	439	161	137	139
30	157	601	770	314	---	514	563	495	394	209	131	138
31	169	---	739	323	---	515	---	480	---	239	132	---
TOTAL	5238	13964	22298	13075	9850	10901	21863	25131	9868	7762	5232	4074
MEAN	169	465	719	422	352	352	729	811	329	250	169	136
MAX	202	601	1020	715	402	527	999	1310	460	410	235	173
MIN	144	231	523	300	302	298	490	472	206	159	131	115
CFSM	.47	1.29	1.99	1.17	.98	.98	2.02	2.25	.91	.69	.47	.38
IN.	.54	1.44	2.30	1.35	1.02	1.12	2.25	2.59	1.02	.80	.54	.42

CAL YR 1982 TOTAL 199030 MEAN 545 MAX 2340 MIN 144 CFSM 1.51 IN 20.51
WTR YR 1983 TOTAL 149256 MEAN 409 MAX 1310 MIN 115 CFSM 1.13 IN 15.38

04099808 LITTLE ELKHART RIVER AT MIDDLEBURY, IN

LOCATION.--Lat 41°40'31", long 85°42'01", in NE$^{1/4}$SE$^{1/4}$ sec.10, T.37 N., R.7 E., Elkhart County, Hydrologic Unit 04050001, on left bank 15 ft downstream from bridge on County Road 16, 0.1 mile east of Middlebury, and 1.7 mi downstream from Rowe Eden ditch.

DRAINAGE AREA.--97.6 mi^2, of which 5.89 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--W 1982: 1980, 81.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft^3/s, July 26, 1981, gage height, 9.58 ft; minimum daily, 34 ft^3/s Aug. 7, Nov. 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 14	1600	529	7.18
May 2	0900	*1220	*8.87

Minimum daily discharge, 37 ft^3/s Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	70	129	126	81	78	114	186	105	72	69	41
2	43	157	123	120	125	78	186	801	101	81	62	40
3	43	164	258	114	147	77	243	434	101	77	60	40
4	43	115	318	109	107	76	174	317	100	73	69	40
5	42	94	329	106	96	75	147	246	96	69	64	40
6	42	82	322	105	92	76	149	210	102	66	59	40
7	45	75	215	104	89	84	174	200	98	64	56	40
8	44	71	179	100	86	106	153	346	93	62	53	40
9	45	67	159	99	84	95	151	228	89	65	51	39
10	46	65	146	100	82	89	172	193	88	68	50	38
11	45	69	137	101	80	85	156	173	85	64	53	38
12	45	83	126	96	79	82	137	160	82	60	52	38
13	44	86	118	94	78	80	173	151	80	58	50	37
14	44	79	115	93	79	79	453	148	77	58	49	37
15	44	74	118	91	86	78	309	144	77	61	48	38
16	44	70	154	89	88	76	221	136	75	59	47	39
17	44	68	145	88	93	75	204	128	72	57	50	38
18	44	66	129	85	91	79	186	123	71	57	50	39
19	44	65	124	83	91	82	169	131	70	55	49	45
20	47	121	122	82	92	81	155	127	69	55	47	43
21	47	134	113	82	93	83	146	120	68	54	46	46
22	46	119	109	84	93	83	138	154	66	54	45	44
23	45	120	109	90	91	84	131	150	64	53	46	43
24	45	133	126	88	87	84	124	130	63	53	45	42
25	45	111	225	85	83	82	119	121	61	53	44	42
26	44	102	207	83	81	82	116	115	61	50	44	42
27	44	97	166	81	79	130	113	110	65	49	44	42
28	44	120	250	80	79	235	117	107	86	49	42	42
29	44	182	190	80	---	166	115	114	82	57	42	41
30	44	151	151	87	---	138	178	113	75	94	42	41
31	49	---	135	83	---	122	---	109	---	82	42	---
TOTAL	1378	3010	5247	2908	2532	2920	5123	5925	2422	1929	1570	1215
MEAN	44.5	100	169	93.8	90.4	94.2	171	191	80.7	62.2	50.6	40.5
MAX	49	182	329	126	147	235	453	801	105	94	69	46
MIN	42	65	109	80	78	75	113	107	61	49	42	37
CFSM	.46	1.03	1.73	.96	.93	.97	1.75	1.96	.83	.64	.52	.42
IN.	.53	1.15	2.00	1.11	.97	1.11	1.95	2.26	.92	.74	.60	.46

CAL YR 1982 TOTAL 45707 MEAN 125 MAX 1410 MIN 42 CFSM 1.28 IN 17.42
WTR YR 1983 TOTAL 36179 MEAN 99.1 MAX 801 MIN 37 CFSM 1.02 IN 13.79

04099850 PINE CREEK NEAR ELKHART, IN

LOCATION.--Lat 41°40'53", long 85°52'57", in NE¼NW¼ sec.7, T.37 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 50 ft upstream from bridge on County Road 14, 0.3 mile east of the intersection of County Roads 17 and 14, and 3.1 miles east of Elkhart.

DRAINAGE AREA.--31.0 mi², of which 8.75 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water stage recorder. Datum of gage 755.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 15 cfs and poor below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 509 ft³/s March 14, 1982, gage height, 7.18 ft; maximum gage height, 9.74 ft July 26, 1981; minimum daily discharge, 3.8 ft³/s July 26, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 170 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	1415	*212	*5.42

Minimum daily discharge, 8.5 ft³/s Sept. 14.

NOTE.--No gage-height record July 5 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	24	24	17	17	24	42	23	17	15	9.4
2	12	40	23	23	35	17	50	157	22	27	14	9.2
3	12	33	71	22	30	16	60	80	23	22	15	9.1
4	12	22	72	21	22	16	40	55	23	19	19	9.1
5	12	20	70	21	21	16	33	44	22	16	14	9.1
6	12	18	59	21	20	16	34	40	23	15	13	9.1
7	13	17	42	21	19	20	44	44	22	15	13	9.1
8	12	16	35	20	19	26	35	77	21	15	12	9.1
9	13	16	31	20	18	21	34	50	20	16	12	9.0
10	12	15	29	21	18	20	36	40	20	16	12	8.8
11	12	16	27	21	18	19	33	36	20	15	13	8.8
12	12	21	25	20	17	19	29	34	19	14	12	8.8
13	12	20	24	20	17	18	38	32	18	14	12	8.6
14	12	18	23	19	17	18	105	31	18	14	11	8.5
15	12	17	24	19	19	17	67	31	18	15	11	8.6
16	12	17	28	19	19	17	45	29	18	14	11	8.8
17	12	16	26	18	21	17	40	28	17	13	12	9.2
18	12	16	24	18	20	18	35	27	17	13	12	9.5
19	12	16	24	17	20	20	32	30	17	13	11	10
20	12	27	23	17	20	19	30	29	17	13	11	9.8
21	12	27	22	17	20	20	28	27	16	13	11	9.5
22	12	23	22	17	20	20	27	43	16	13	11	9.3
23	12	26	22	18	20	20	26	40	16	13	11	9.2
24	12	26	25	17	19	20	25	32	16	13	10	9.2
25	12	22	43	17	19	19	24	29	16	12	10	9.2
26	12	20	36	17	18	19	23	26	16	12	10	9.2
27	12	20	30	17	18	34	23	25	16	12	10	9.2
28	12	26	48	16	17	49	25	24	21	12	9.6	9.2
29	11	33	33	16	---	34	25	26	19	15	9.6	9.2
30	12	26	27	19	---	28	43	25	17	18	9.6	9.2
31	12	---	25	18	---	25	---	25	---	16	9.6	---
TOTAL	373	645	1037	591	558	655	1113	1258	567	465	366.4	274.0
MEAN	12.0	21.5	33.5	19.1	19.9	21.1	37.1	40.6	18.9	15.0	11.8	9.13
MAX	13	40	72	24	35	49	105	157	23	27	19	10
MIN	11	15	22	16	17	16	23	24	16	12	9.6	8.5
CFSM	.39	.69	1.08	.62	.64	.68	1.20	1.31	.61	.48	.38	.30
IN.	.45	.77	1.24	.71	.67	.79	1.34	1.51	.68	.56	.44	.33

CAL YR 1982 TOTAL 10358.0 MEAN 28.4 MAX 354 MIN 11 CFSM .92 IN 12.43
WTR YR 1983 TOTAL 7902.4 MEAN 21.7 MAX 157 MIN 8.5 CFSM .70 IN 9.48

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 85°28'32", in NE¼NW¼ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North at Cosperville, 1,300 ft downstream from Boyd ditch, 1.7 miles upstream from Hustin ditch, and 3.1 miles downstream from Waldron Lake.

DRAINAGE AREA.--142 mi².

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles (5.0 km) upstream, published as North Branch Elkhart River near Cosperville. Records may not be equivalent.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--12 years, 137 ft³/s, 13.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 919 ft³/s Mar. 23, 1982, gage height, 8.12 ft; minimum daily, 2.4 ft³/s Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 476 ft³/s May. 6, gage height, 6.11 ft; minimum daily, 7.8 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	79	287	315	120	120	158	256	175	138	48	16
2	52	183	286	317	135	119	173	375	167	147	43	14
3	48	249	306	314	164	119	203	441	164	148	38	14
4	47	269	347	309	161	118	209	461	160	143	41	13
5	45	272	382	306	151	120	203	474	154	134	42	12
6	43	271	403	298	143	125	197	474	159	124	41	12
7	43	263	401	289	139	140	194	469	160	113	38	12
8	41	250	389	280	131	163	194	462	155	104	35	12
9	41	239	385	269	129	168	197	445	147	98	33	12
10	40	225	380	261	126	164	206	425	139	91	29	11
11	37	213	375	248	121	158	214	403	133	77	30	11
12	35	209	364	229	117	152	213	382	126	78	30	11
13	34	207	349	211	116	147	213	363	120	69	26	9.7
14	33	202	334	197	115	141	253	343	114	53	27	8.5
15	32	192	329	184	117	137	286	325	109	59	23	7.8
16	32	185	339	171	121	131	301	303	102	60	23	9.2
17	31	185	337	161	129	127	310	281	96	57	25	9.9
18	30	192	323	147	133	131	315	261	89	56	29	11
19	30	199	312	126	135	131	310	245	68	54	30	21
20	33	236	300	113	135	135	303	234	68	51	28	30
21	36	263	287	105	137	141	292	221	69	47	27	54
22	36	272	275	106	140	131	284	218	65	49	24	54
23	35	272	265	121	140	119	274	229	63	48	23	50
24	34	271	266	129	137	113	261	226	61	45	22	45
25	34	266	303	127	133	106	245	218	58	42	20	42
26	32	261	325	125	127	103	231	209	60	37	19	41
27	33	256	328	120	123	114	214	200	80	38	19	39
28	32	262	336	117	121	160	211	190	102	31	19	37
29	45	277	342	115	---	185	209	188	129	25	16	35
30	87	286	334	119	---	186	225	186	137	48	16	33
31	74	---	321	121	---	174	---	181	---	52	16	---
TOTAL	1258	7006	10310	6050	3696	4278	7098	9688	3429	2316	880	687.1
MEAN	40.6	234	333	195	132	138	237	313	114	74.7	28.4	22.9
MAX	87	286	403	317	164	186	315	474	175	148	48	54
MIN	30	79	265	105	115	103	158	181	58	25	16	7.8
CFSM	.29	1.65	2.35	1.37	.93	.97	1.67	2.20	.80	.53	.20	.16
IN.	.33	1.84	2.70	1.58	.97	1.12	1.86	2.54	.90	.61	.23	.18

CAL YR 1982 TOTAL 74770.0 MEAN 205 MAX 916 MIN 22 CFSM 1.44 IN 19.59
WTR YR 1983 TOTAL 56696.1 MEAN 155 MAX 474 MIN 7.8 CFSM 1.09 IN 14.85

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE$^{1/4}$ NE$^{1/4}$ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft downstream from bridge on State Highway 9, 400 ft downstream from Miller Lake Outlet, 0.8 mile northeast of Burr Oak, and 4.5 miles south of Albion.

DRAINAGE AREA.--19.2 mi^2.

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark).

REMARKS.--Records good. Occasional regulation at Miller Lake Outlet.

AVERAGE DISCHARGE.--14 years, 17.7 ft^3/s, 12.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft^3/s Mar. 14, 1982, gage height, 6.71 ft; minimum daily, 0.13 ft^3/s Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 185 ft^3/s May 3, gage height, 4.90 ft; minimum daily, 0.52 ft^3/s Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.4	49	41	11	13	40	46	11	26	1.0	.68
2	3.8	32	45	33	16	12	46	136	10	32	3.5	.68
3	2.6	66	48	27	24	12	66	181	10	31	5.2	.68
4	2.0	90	64	23	28	13	76	155	9.5	28	5.5	.68
5	2.0	82	91	20	30	13	71	118	9.3	24	5.0	.68
6	2.0	85	111	18	26	13	62	92	9.7	20	4.0	.70
7	2.5	60	99	16	23	13	54	73	10	17	3.4	.68
8	2.5	49	80	15	20	13	48	60	10	14	2.2	.60
9	2.5	39	65	14	17	13	47	47	9.1	12	.87	.60
10	3.7	30	55	14	15	13	51	38	9.1	11	.88	.60
11	3.7	24	44	14	12	12	60	30	8.5	8.3	.97	.60
12	2.9	23	35	13	10	11	62	25	8.1	7.0	.84	.60
13	2.4	21	29	12	9.3	11	59	20	7.4	6.2	.87	.60
14	2.0	19	24	10	8.8	10	77	18	6.8	5.6	.87	.60
15	1.7	17	22	9.9	8.7	9.4	93	18	6.0	5.0	.79	.60
16	1.5	16	27	9.5	9.5	9.3	90	16	5.3	3.5	.78	.63
17	1.3	15	30	9.1	11	8.7	78	15	4.4	3.3	.68	.68
18	1.2	14	33	8.4	12	9.1	65	14	3.8	4.4	.68	.68
19	1.2	13	32	7.7	13	9.1	55	13	3.5	3.8	.68	.62
20	1.4	24	29	7.2	13	9.3	46	13	3.3	3.2	.68	.59
21	1.5	37	26	6.9	13	10	39	12	3.0	3.0	.68	.62
22	1.4	49	24	7.3	15	10	33	14	2.6	2.6	.61	.60
23	1.3	53	21	9.0	17	10	30	15	2.4	2.2	.60	.60
24	1.2	50	22	9.5	17	10	27	15	1.7	1.4	.60	.59
25	1.2	45	31	10	16	10	24	16	1.6	1.2	.64	.58
26	1.2	40	49	10	15	11	23	14	1.2	1.0	.60	.60
27	1.2	36	59	10	14	14	21	13	1.2	.98	.60	.57
28	1.3	36	65	9.8	13	28	22	12	4.7	.95	.57	.56
29	1.3	42	65	9.4	---	45	22	12	11	1.4	.60	.52
30	1.4	48	60	10	---	51	30	12	18	2.5	.61	.52
31	1.9	---	51	11	---	47	---	11	---	2.0	.68	---
TOTAL	61.9	1159.4	1485	424.7	437.3	472.9	1517	1274	202.2	284.53	46.18	18.54
MEAN	2.00	38.6	47.9	13.7	15.6	15.3	50.6	41.1	6.74	9.18	1.49	.62
MAX	4.1	90	111	41	30	51	93	181	18	32	5.5	.70
MIN	1.2	4.4	21	6.9	8.7	8.7	21	11	1.2	.95	.57	.52
CFSM	.10	2.01	2.50	.71	.81	.80	2.64	2.14	.35	.48	.08	.03
IN.	.12	2.25	2.88	.82	.85	.92	2.94	2.47	.39	.55	.09	.04

CAL YR 1982 TOTAL 11723.58 MEAN 32.1 MAX 333 MIN .66 CFSM 1.67 IN 22.71
WTR YR 1983 TOTAL 7383.65 MEAN 20.2 MAX 181 MIN .52 CFSM 1.05 IN 14.31

04100295 RIMMELL BRANCH NEAR ALBION, IN

LOCATION.--Lat 41°23'07", long 85°22'14", in NE¼SE¼ sec.21, T.34 N., R.10 E., Noble County, Hydrologic Unit 04050001, on right bank 900 ft downstream from culvert on County Road 300 E, .75 mile south of State Highway 8, 3.0 miles east of intersection of State Highway 9 and State Highway 8 in Albion.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--November 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage 935.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good above 1 ft³/s and poor below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 397 ft³/s April 14, 1981, gage height 12.82 ft; minimum daily, 0.14 ft³/s many days during 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 2	1200	250	10.75	Apr. 14	1200	123	8.55
Mar. 27	1930	131	8.71	May 2	unknown	*336	a *12.0
Apr. 2	1715	114	8.37				

Minimum daily, 0.28 ft³/s Sept. 4, 12-15.

a About

NOTE.--No record May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	2.1	14	9.7	4.9	5.1	11	47	5.0	4.5	.61	.32
2	.94	166	15	8.6	27	5.0	63	210	4.4	11	.53	.32
3	.83	96	51	7.5	20	4.7	56	70	4.4	6.1	.47	.30
4	.79	46	72	6.0	11	4.6	31	49	4.3	3.9	.57	.28
5	.77	27	73	5.7	7.1	4.5	21	34	3.8	2.9	.59	.31
6	.77	20	50	5.8	6.1	4.8	19	25	6.7	2.2	.54	.47
7	.84	14	30	5.8	5.6	6.5	21	9.0	6.0	1.8	.51	.53
8	.88	10	22	5.4	5.1	7.5	16	15	4.8	1.6	.47	.44
9	.83	8.1	17	5.2	4.8	6.4	33	13	3.8	1.5	.44	.38
10	.82	7.0	14	6.0	4.7	5.6	39	11	3.2	1.6	.44	.34
11	.74	6.5	12	6.8	4.5	5.1	28	9.8	2.9	1.3	.50	.30
12	.71	13	9.4	5.8	4.0	4.6	19	7.7	2.6	1.1	.50	.28
13	.66	11	7.5	5.0	3.8	4.4	25	6.3	2.4	1.0	.45	.28
14	.66	8.3	6.4	4.8	3.7	4.3	86	6.4	2.2	.90	.44	.28
15	.66	7.0	9.7	4.4	4.5	3.9	45	7.4	2.2	.81	.42	.28
16	.66	6.4	31	4.2	8.3	3.6	32	6.5	1.9	.76	.40	.35
17	.66	5.6	17	3.9	11	3.5	22	5.7	1.8	.76	.46	.36
18	.66	5.3	12	3.7	9.5	4.3	18	5.2	1.6	.72	.51	.36
19	.67	5.6	12	3.6	9.9	4.9	15	5.8	1.6	.72	.43	.89
20	1.1	53	11	3.4	11	4.8	13	5.8	1.6	.72	.39	.96
21	1.0	34	9.4	3.3	11	7.2	12	5.2	1.5	.68	.45	.93
22	.85	21	8.3	3.8	11	5.3	9.2	15	1.4	.64	.36	.71
23	.77	17	8.5	8.7	9.9	5.4	7.7	12	1.4	.60	.36	.63
24	.72	19	24	6.0	8.4	5.6	7.1	8.4	1.3	.60	.36	.61
25	.72	14	45	4.7	6.9	5.2	7.0	7.1	1.2	.60	.34	.60
26	.77	11	39	4.2	5.9	5.4	6.7	6.0	1.2	.55	.32	.60
27	.82	12	17	3.8	5.3	51	6.1	5.3	1.6	.55	.32	.59
28	.77	32	55	3.6	5.2	50	15	5.0	14	.51	.32	.52
29	.77	45	23	3.6	---	23	17	6.5	9.5	.51	.32	.47
30	.88	22	14	11	---	16	51	6.3	6.3	.51	.32	.43
31	.94	---	11	6.3	---	13	---	5.6	---	.60	.32	---
TOTAL	24.65	744.9	740.2	170.3	230.1	285.2	751.8	632.0	106.6	52.24	13.46	14.12
MEAN	.80	24.8	23.9	5.49	8.22	9.20	25.1	20.4	3.55	1.69	.43	.47
MAX	1.1	166	73	11	27	51	86	210	14	11	.61	.96
MIN	.66	2.1	6.4	3.3	3.7	3.5	6.1	5.0	1.2	.51	.32	.28
CFSM	.08	2.32	2.23	.51	.77	.86	2.35	1.91	.33	.16	.04	.04
IN.	.09	2.59	2.57	.59	.80	.99	2.61	2.20	.37	.18	.05	.05

CAL YR 1982 TOTAL 5818.19 MEAN 15.9 MAX 312 MIN .48 CFSM 1.49 IN 20.23
WTR YR 1983 TOTAL 3765.57 MEAN 10.3 MAX 210 MIN .28 CFSM .96 IN 13.09

04100465 TURKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE$^{1/4}$ SE$^{1/4}$ sec.6, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, on right bank 75 ft upstream from Main Street bridge in Syracuse and 1,500 ft downstream from dam at outlet of Syracuse Lake.

DRAINAGE AREA.--43.8 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 848.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--14 years, 37.2 ft^3/s, 11.53 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 170 ft^3/s June 14, 1981, gage height, 5.37 ft; minimum daily, 0.82 ft^3/s Oct. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 113 ft^3/s May 3, gage height, 4.33 ft; minimum daily, 2.4 ft^3/s Sept. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	10	87	88	33	79	86	92	73	5.0	5.6	3.2
2	55	22	86	87	34	63	93	111	74	8.6	4.5	3.2
3	55	21	88	85	35	7.0	97	111	75	5.5	4.1	2.8
4	55	18	94	84	37	7.0	94	105	75	4.7	5.3	2.4
5	55	15	98	83	36	6.5	91	99	74	4.4	4.3	2.5
6	55	12	102	82	35	7.3	90	95	78	4.3	4.0	4.1
7	56	12	103	81	35	8.4	92	94	77	4.1	3.8	3.8
8	55	12	100	80	35	8.7	92	91	28	4.1	3.8	3.6
9	55	14	97	79	35	8.4	91	89	9.3	4.0	3.8	3.3
10	55	26	95	79	35	7.5	92	87	8.5	3.6	3.6	3.4
11	55	68	93	79	34	7.3	92	85	7.4	3.7	4.0	3.5
12	54	69	91	78	34	6.5	91	84	7.2	3.9	3.6	3.9
13	54	68	89	78	33	6.5	94	82	7.8	3.8	3.0	3.6
14	53	67	88	77	33	6.2	103	82	7.7	3.7	3.0	3.3
15	53	66	87	77	33	6.5	104	80	7.8	3.6	3.4	3.7
16	52	66	89	76	33	16	100	79	7.5	3.4	3.5	4.8
17	52	65	90	76	35	84	97	78	7.1	3.4	5.2	4.2
18	42	64	89	75	35	85	95	77	6.3	3.7	4.0	4.1
19	4.9	63	88	75	35	85	94	79	6.0	3.7	3.7	7.2
20	5.0	67	87	74	35	84	92	78	6.5	3.4	3.6	4.9
21	4.9	75	86	74	35	86	91	77	6.1	3.1	3.4	4.2
22	4.7	81	85	73	48	85	90	79	5.8	2.8	3.4	3.2
23	4.6	84	84	53	84	84	89	75	5.7	2.8	3.3	3.0
24	4.3	85	84	33	83	84	88	73	5.2	2.7	3.2	2.7
25	4.4	85	88	33	82	83	87	72	4.3	3.0	3.1	2.6
26	4.7	84	91	33	80	83	86	70	4.2	3.0	3.1	3.2
27	4.7	83	93	33	80	86	85	70	5.1	2.8	3.0	2.7
28	4.8	84	94	33	80	91	86	70	7.4	2.9	3.4	2.8
29	4.7	86	94	33	---	90	85	74	5.4	9.2	3.1	3.0
30	4.2	87	93	33	---	88	88	73	5.1	9.1	3.0	3.1
31	4.4	---	90	33	---	86	---	73	---	7.7	3.1	---
TOTAL	1026.3	1659	2823	2057	1262	1535.8	2755	2584	697.4	133.7	114.9	106.0
MEAN	33.1	55.3	91.1	66.4	45.1	49.5	91.8	83.4	23.2	4.31	3.71	3.53
MAX	56	87	103	88	84	91	104	111	78	9.2	5.6	7.2
MIN	4.2	10	84	33	33	6.2	85	70	4.2	2.7	3.0	2.4
CFSM	.76	1.26	2.08	1.52	1.03	1.13	2.10	1.90	.53	.10	.09	.08
IN.	.87	1.41	2.40	1.75	1.07	1.30	2.34	2.19	.59	.11	.10	.09

CAL YR 1982 TOTAL 20187.6 MEAN 55.3 MAX 152 MIN 3.7 CFSM 1.26 IN 17.15
WTR YR 1983 TOTAL 16754.1 MEAN 45.9 MAX 111 MIN 2.4 CFSM 1.05 IN 14.23

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft downstream from River Avenue bridge at Goshen, 0.4 mile upstream from Rock Run, and at mile 16.1.

DRAINAGE AREA.--594 mi².

PERIOD OF RECORD.--April 1931 to current year.

REVISED RECORDS.--WSP 1337: 1939(M). WSP 1557: 1954. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 769.43 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--52 years, 514 ft³/s, 11.75 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft³/s Mar. 14, 1982, gage height, 11.94 ft; minimum daily, 7.0 ft³/s Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 6	1300	2050	5.85	May 3	0300	*3070	*7.53
Apr. 15	0600	2290	6.26				

Minimum daily discharge, 108 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	282	1090	1150	502	538	830	1210	744	422	300	135
2	272	546	1000	1110	552	526	1010	2520	706	507	268	129
3	262	1000	1210	1060	733	515	1560	2800	693	535	247	127
4	261	1070	1700	1030	716	475	1500	2250	684	479	270	122
5	255	931	1940	988	603	459	1260	2000	659	441	297	120
6	253	873	2030	953	591	462	1150	1830	672	420	274	119
7	259	872	1880	921	593	496	1200	1760	685	405	244	125
8	250	870	1640	889	587	551	1240	2130	648	386	239	122
9	250	855	1490	848	571	576	1140	2130	602	363	212	118
10	244	816	1400	834	563	557	1140	1720	563	357	202	114
11	240	795	1330	807	541	542	1130	1490	551	346	208	113
12	237	823	1250	777	521	527	1080	1350	521	314	200	112
13	232	850	1170	736	514	514	1140	1240	499	299	193	110
14	230	800	1110	703	505	502	1870	1160	479	282	186	110
15	223	731	1070	674	512	491	2180	1090	471	261	185	108
16	220	681	1080	640	531	474	1790	1020	449	252	172	118
17	216	654	1140	602	567	465	1540	963	424	248	186	121
18	214	619	1080	547	586	512	1410	912	406	247	206	120
19	215	607	1020	508	586	533	1330	900	392	236	197	178
20	209	696	982	516	587	536	1250	875	371	235	184	188
21	193	892	944	547	586	554	1180	830	352	228	173	187
22	189	944	901	559	587	556	1100	883	340	214	168	195
23	186	927	876	563	585	555	1050	1070	329	207	162	197
24	180	963	888	558	592	552	992	1010	315	210	154	190
25	178	954	1120	536	582	545	938	865	298	211	146	182
26	178	897	1400	519	565	539	892	793	290	199	143	181
27	177	867	1350	505	552	599	847	747	294	189	146	180
28	174	887	1380	496	545	1020	839	721	344	176	146	175
29	167	1090	1530	483	---	1140	818	759	397	179	147	169
30	165	1220	1350	501	---	942	930	901	412	309	142	164
31	212	---	1210	514	---	856	---	816	---	349	139	---
TOTAL	6825	25012	39561	22074	16055	18109	36336	40745	14590	9506	6136	4329
MEAN	220	834	1276	712	573	584	1211	1314	486	307	198	144
MAX	284	1220	2030	1150	733	1140	2180	2800	744	535	300	197
MIN	165	282	876	483	502	459	818	721	290	176	139	108
CFSM	.37	1.40	2.15	1.20	.97	.98	2.04	2.21	.82	.52	.33	.24
IN.	.43	1.57	2.48	1.38	1.01	1.13	2.28	2.55	.91	.60	.38	.27

CAL YR 1982 TOTAL 302128 MEAN 828 MAX 5950 MIN 157 CFSM 1.39 IN 18.92
WTR YR 1983 TOTAL 239278 MEAN 656 MAX 2800 MIN 108 CFSM 1.10 IN 14.99

04101000 ST. JOSEPH RIVER AT ELKHART, IN

LOCATION.--Lat 41°41'30", long 85°58'30", in SW¼NE¼ sec.5, T.37 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on left bank 200 ft downstream from Elkhart River, 200 ft upstream from Main Street bridge in Elkhart, 2,000 ft downstream from Christiana Creek, 0.5 mile downstream from Elkhart Hydroelectric Plant, and at mile 76.5.

DRAINAGE AREA.--3,370 mi^2.

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mile downstream at different datum from September 1924 to March 1926 are available from the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--36 years, 3,177 ft^3/s, 12.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft^3/s Mar. 21, 1982, gage height, 27.91 ft; minimum daily, 336 ft^3/s Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,100 ft^3/s May 3, gage height, 23.62 ft; minimum daily, 1,010 ft^3/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	1860	4720	5810	3250	3560	5170	6010	5030	3280	2740	1340
2	2210	2600	4310	5470	3260	3410	5590	8490	4710	3550	2530	1360
3	2190	3710	5590	5240	3950	3210	6660	9600	4870	4130	2320	1080
4	2190	3870	6080	4970	3880	3220	6510	9300	4900	3660	2350	1030
5	1810	3620	6550	4720	3630	3260	6130	9250	4660	3590	2470	1130
6	1830	3950	7010	4830	3640	3210	6050	9040	4650	3220	2270	1620
7	1710	3670	6820	4310	3630	3340	6070	9060	4670	2980	2060	1540
8	1780	3710	6890	4610	3540	3620	6320	9470	4530	3010	2240	1200
9	1810	3640	6650	4320	3530	3690	6190	9460	4410	2430	1960	1280
10	1660	3520	6420	4170	3490	3720	6330	8740	4100	2480	1790	1040
11	1990	3840	6270	4010	3360	3660	6540	8530	4060	2530	1840	1040
12	1810	3820	5870	4320	3180	3760	5960	8170	4030	2580	2020	1390
13	1880	3790	5450	3900	3160	3680	6890	7610	3620	2290	1520	1060
14	1970	3820	5330	4190	3020	3100	8290	7180	3440	2020	1590	1010
15	1930	3870	5260	3910	2950	2990	8890	6860	3430	2120	2160	1110
16	1800	3760	5170	3820	3080	3250	8720	6350	3210	2190	2400	1520
17	1700	3330	5080	3550	3410	3300	8460	5960	3120	1530	2130	1270
18	1730	3360	5070	3160	3540	3200	8210	5350	2860	1980	2040	1170
19	1690	3310	5030	2920	3350	3320	7690	5360	2530	2380	2120	1270
20	1600	3570	5050	3010	3460	3510	7550	5390	2590	1820	1830	1770
21	1860	4120	4810	3250	3700	3700	7090	5290	2750	1880	1530	1640
22	2010	4460	4720	3380	3730	3490	6520	5630	2490	1470	1270	1590
23	2190	4230	4750	3480	3910	3620	6600	6130	2180	1830	1400	1900
24	1390	4450	4550	3530	3690	3590	6240	5940	2180	1310	1820	1620
25	1770	4380	5350	3350	3820	3740	5840	5890	2140	1960	1430	1610
26	1910	4580	5610	3260	3870	3500	5410	5930	1870	2260	1310	1640
27	2000	4510	5640	3330	3760	3690	5110	5740	2190	2040	1260	1810
28	1620	4530	6180	3060	3550	4690	4870	5430	2630	1680	1210	1900
29	1620	4870	6300	3140	---	4950	5060	5100	2950	2150	1670	1570
30	1460	5050	6290	3220	---	5340	5570	5160	3220	1810	1400	1490
31	1520	---	5950	3310	---	5430	---	5350	---	2450	1400	---
TOTAL	56560	115800	174770	121550	98340	113750	196530	216770	104020	74610	58080	42000
MEAN	1825	3860	5638	3921	3512	3669	6551	6993	3467	2407	1874	1400
MAX	2210	5050	7010	5810	3950	5430	8890	9600	5030	4130	2740	1900
MIN	1390	1860	4310	2920	2950	2990	4870	5100	1870	1310	1210	1010
CFSM	.54	1.15	1.67	1.16	1.04	1.09	1.94	2.08	1.03	.71	.56	.42
IN.	.62	1.28	1.93	1.34	1.09	1.26	2.17	2.39	1.15	.82	.64	.46

CAL YR 1982 TOTAL 1650260 MEAN 4521 MAX 18500 MIN 1320 CFSM 1.34 IN 18.22
WTR YR 1983 TOTAL 1372780 MEAN 3761 MAX 9600 MIN 1010 CFSM 1.12 IN 15.15

04101500 ST. JOSEPH RIVER AT NILES, MI
(National stream-quality accounting network station)

LOCATION.--Lat 41°49'45", long 86°15'35", in SW¼ sec.26, T.7 S., R.17 W., Berrien County, Hydrologic Unit 04050001, on right bank 100 ft upstream from Main Street bridge in Niles, 0.6 mi downstream from dam at French Paper Co., 1 mi upstream from Dowagiac River, and at mile 44.

DRAINAGE AREA.--3,666 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1931, 1933-36, 1940-43, 1945-46(M). WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 633.02 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, at datum 2.00 ft higher. Oct. 1, 1930 to Feb. 11, 1931, nonrecording gage on Main Street bridge, and Feb. 12 to June 30. 1931, nonrecording gage 50 ft upstream from present site (gage heights referred to NGVD). Since Apr. 13, 1970, auxiliary water-stage recorder at sewage-treatment plant, 1.1 mi downstream from base gage at same datum. Oct. 1, 1943 to Apr. 12, 1970, auxiliary gage was headwater gage at hydroelectric plant at Buchanan Dam, 8 mi downstream from base gage at different datum.

REMARKS.--Records good, except those for period of no gage-height record, Nov. 7 to Dec. 14, which are fair. Flow regulated by powerplants above station. Water-quality records for 1983 water year published in Water Resources Data Michigan.

AVERAGE DISCHARGE.--53 years, 3,259 ft^3/s, 12.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft^3/s Apr. 5, 1950, gage height, 15.10 ft, present datum; minimum daily, 420 ft^3/s Aug. 30, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,400 ft^3/s May 3, gage height, 11.36 ft; minimum daily, 1,230 ft^3/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	2060	4600	6450	3650	3870	5890	6580	5410	3650	3320	1830
2	2270	3010	4500	6260	3790	3940	6050	9260	5130	4000	2790	1740
3	2450	3580	5000	5920	4210	3320	7770	12100	5060	4260	2980	1450
4	2440	4200	5300	5550	4490	3540	7980	11000	5180	4520	2700	1440
5	2450	4130	5500	4370	4240	3620	7180	10400	5120	3880	2800	1400
6	2400	3980	5900	6210	4190	3610	6830	9980	5050	3950	2820	1620
7	2370	3600	6300	4050	3870	3660	6630	10100	5010	3640	2610	2060
8	2030	3400	6700	5280	3590	3670	7090	10500	4900	3130	2780	1940
9	2070	3400	6800	5030	3920	4100	7290	10700	4730	3280	2460	1830
10	2050	3500	6700	4820	3760	4160	7020	10200	4700	2700	2490	1250
11	2000	3600	6400	3640	3810	3960	7390	9360	4330	2890	2170	1380
12	2310	3700	6100	4950	3910	3660	7010	9040	4420	3030	2130	1410
13	2300	3700	5800	4160	3740	4240	7160	8490	4280	2790	2290	1700
14	2310	3800	5640	4270	3460	4030	9450	7990	3930	2570	2160	1460
15	2440	4200	5600	4430	3000	3250	11300	7460	4130	2480	1930	1230
16	2210	4100	5480	4340	3370	3250	10400	6720	3800	2540	2950	1550
17	2000	3300	5490	4360	3730	3560	9910	6510	3710	2420	2830	1660
18	1930	3500	5430	3440	3820	3580	9230	6140	4040	2140	2400	1730
19	1950	3700	5400	3420	3960	3550	8790	5630	3500	2250	2420	1870
20	2010	3800	5500	2950	3670	3670	8100	5770	3140	2780	2430	1890
21	2060	4000	5440	3340	3920	4020	8000	5690	3240	2200	2300	2570
22	2280	4200	5100	3790	3990	3910	7140	5870	3610	2170	2060	1910
23	2440	4400	4870	3810	4280	3720	6880	6690	2810	2120	1500	1950
24	2270	4500	5010	3800	4070	4070	6920	6660	2330	2140	1770	2190
25	1660	4600	5650	3710	3930	3870	6590	6140	2770	1910	2440	2100
26	1950	4800	6610	3610	4030	3980	5970	6570	2770	2410	1830	1890
27	2430	4800	6240	3550	4040	4000	5570	5910	1600	2540	1530	1910
28	2430	4800	6630	3590	3940	5000	5350	6060	3040	2350	1590	2120
29	1670	4800	7030	3560	---	5780	5290	5880	3330	1970	1710	2200
30	1950	4800	6900	3550	---	5700	5850	5690	3290	3420	2120	1890
31	1970	---	6730	3570	---	5990	---	5650	---	2390	1840	---
TOTAL	67320	117960	180350	133780	108380	124280	222030	240740	118360	88520	72150	53170
MEAN	2172	3932	5818	4315	3871	4009	7401	7766	3945	2855	2327	1772
MAX	2450	4800	7030	6450	4490	5990	11300	12100	5410	4520	3320	2570
MIN	1660	2060	4500	2950	3000	3250	5290	5630	1600	1910	1500	1230
CFSM	.59	1.07	1.59	1.18	1.06	1.09	2.02	2.12	1.08	.78	.64	.48
IN.	.68	1.20	1.83	1.36	1.10	1.26	2.25	2.44	1.20	.90	.73	.54

CAL YR 1982 TOTAL 1797690 MEAN 4925 MAX 19800 MIN 1390 CFSM 1.34 IN 18.24
WTR YR 1983 TOTAL 1527040 MEAN 4184 MAX 12100 MIN 1230 CFSM 1.14 IN 15.50

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE$^{1/4}$ SW$^{1/4}$ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, on left bank 6 ft upstream from bridge on County Road 775 South, 0.5 mile downstream from Hamilton Lake outlet, and 0.5 mile southeast of Hamilton.

DRAINAGE AREA.--37.5 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--14 years, 32.1 ft^3/s, 11.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 603 ft^3/s Mar. 17, 1982, gage height, 11.52 ft; minimum daily, 0.52 ft^3/s Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 3	0400	265	8.06	Apr. 3	0700	154	6.53
Dec. 5	2200	185	7.01	Apr. 14	2100	177	6.89
Mar. 28	1700	168	6.76	May 2	1700	*404	*9.64

Minimum daily discharge, 1.4 ft^3/s Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	18	68	48	20	22	67	100	24	38	3.6	1.8
2	3.7	208	62	43	45	21	94	362	21	34	3.1	1.7
3	3.3	249	82	38	58	20	151	361	20	25	2.9	1.6
4	2.8	184	138	32	49	19	129	266	21	19	3.2	1.5
5	2.6	125	171	28	41	19	97	184	18	14	3.2	1.6
6	2.8	84	176	26	36	20	80	129	22	9.0	3.0	1.7
7	6.9	62	131	25	32	27	75	96	19	6.5	2.8	1.8
8	11	50	96	22	27	31	67	79	16	5.4	2.6	1.7
9	5.7	42	72	21	24	28	82	62	14	7.9	2.4	1.7
10	4.1	35	57	24	21	26	122	53	16	8.6	2.2	1.7
11	3.2	30	46	26	19	24	108	47	15	6.4	3.0	1.7
12	2.6	40	38	24	17	20	84	41	13	5.8	2.7	1.6
13	2.3	41	33	21	16	18	79	36	12	4.5	2.6	1.5
14	2.3	33	30	20	15	17	155	35	11	3.9	2.4	1.4
15	2.1	26	34	18	16	16	160	38	9.2	3.7	2.3	1.4
16	1.9	21	65	16	19	14	119	32	8.7	3.3	2.3	1.6
17	1.7	19	61	14	34	14	95	26	7.3	3.1	2.4	1.7
18	1.7	18	52	12	37	17	72	22	6.3	2.9	2.8	1.7
19	1.7	17	48	11	39	24	59	24	5.3	2.8	2.7	1.9
20	2.4	45	46	10	44	23	51	27	4.8	2.8	2.7	2.2
21	2.2	61	41	10	48	38	45	24	4.6	2.8	2.4	3.4
22	2.1	57	37	13	49	35	41	49	4.4	3.4	2.3	3.1
23	2.2	57	36	18	47	30	38	54	4.4	3.4	2.2	2.7
24	2.3	61	50	18	43	28	34	45	4.3	3.1	2.1	2.5
25	2.3	50	90	17	38	25	29	42	4.0	2.8	2.1	2.5
26	2.3	46	120	16	31	24	24	36	3.9	2.6	2.3	2.5
27	2.3	41	98	15	26	56	23	26	5.6	2.5	2.3	2.5
28	2.3	51	113	14	24	157	31	22	42	2.5	2.2	2.4
29	2.4	82	97	14	---	151	34	29	54	2.5	2.1	2.4
30	1.8	80	72	22	---	115	69	29	46	2.5	2.0	2.5
31	2.2	---	57	22	---	87	---	26	---	3.2	1.9	---
TOTAL	93.4	1933	2317	658	915	1166	2314	2402	456.8	237.9	78.8	60.0
MEAN	3.01	64.4	74.7	21.2	32.7	37.6	77.1	77.5	15.2	7.67	2.54	2.00
MAX	11	249	176	48	58	157	160	362	54	38	3.6	3.4
MIN	1.7	17	30	10	15	14	23	22	3.9	2.5	1.9	1.4
CFSM	.08	1.72	1.99	.57	.87	1.00	2.06	2.07	.41	.21	.07	.05
IN.	.09	1.92	2.30	.65	.91	1.16	2.30	2.38	.45	.24	.08	.06

CAL YR 1982 TOTAL 18812.0 MEAN 51.5 MAX 596 MIN 1.7 CFSM 1.37 IN 18.66
WTR YR 1983 TOTAL 12631.9 MEAN 34.6 MAX 362 MIN 1.4 CFSM .92 IN 12.55

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW1/4 SW1/4 sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003, on left bank at bridge on Ohio State Highway 249, 3.5 miles northeast of Newville, 6.5 miles northwest of Hicksville, Ohio, and at mile 42.3.

DRAINAGE AREA.--610 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 523 ft³/s, 11.64 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft³/s Apr. 6, 1950, gage height, 17.05 ft; maximum gage height, 17.96 ft Mar. 17, 1982; minimum daily discharge, 14 ft³/s Sept. 10, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,090 ft³/s May 4, gage height, 14.90 ft; minimum daily, 38 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	91	1510	1430	320	400	2080	1340	404	1590	174	63
2	91	1090	1450	1060	470	390	1980	2830	372	2040	303	59
3	81	1780	1460	810	1200	360	2230	3940	344	2050	272	57
4	74	1890	1840	671	1200	343	2260	4840	323	1650	227	54
5	71	1810	2100	577	1000	330	2150	4890	308	1000	180	51
6	68	1600	2260	513	800	320	1990	4020	338	577	154	52
7	68	1360	2250	472	600	326	1880	3100	390	408	140	60
8	66	908	2080	422	510	361	1700	2480	407	317	126	51
9	70	571	1810	393	450	468	1610	2060	380	274	113	49
10	75	428	1600	390	380	613	1920	1730	332	256	102	46
11	72	359	1230	409	330	648	1990	1450	308	216	103	42
12	70	348	883	427	310	553	1920	1240	298	193	102	41
13	69	443	686	425	300	456	1840	1020	245	165	123	41
14	69	550	566	396	280	393	2150	835	211	146	130	39
15	66	536	501	350	280	356	2340	711	203	126	114	38
16	63	443	893	300	300	329	2290	638	190	116	99	39
17	63	363	1160	260	450	304	2170	577	171	108	93	40
18	58	313	1120	230	640	286	2060	513	157	100	92	40
19	57	279	1000	210	680	296	1850	468	147	91	85	46
20	57	470	868	190	780	350	1480	441	139	102	82	46
21	55	949	771	200	820	392	1130	433	134	123	77	65
22	54	1190	701	250	810	405	910	506	126	127	73	72
23	55	1260	641	271	760	431	768	730	121	164	68	82
24	58	1390	928	279	680	456	663	858	114	351	70	85
25	57	1360	1560	275	580	460	581	851	108	348	71	76
26	58	1190	2040	262	500	445	515	761	102	261	69	67
27	59	1010	2070	257	430	681	455	621	115	190	66	62
28	66	890	2120	249	400	1710	426	508	260	153	66	61
29	67	1270	2100	240	---	2050	437	449	771	131	66	59
30	64	1490	1990	300	---	2170	762	457	1190	118	88	58
31	65	---	1750	350	---	2170	---	434	---	121	77	---
TOTAL	2065	27631	43938	12868	16260	19252	46557	45731	8708	13612	3605	1641
MEAN	66.6	921	1417	415	581	621	1552	1475	290	439	116	54.7
MAX	99	1890	2260	1430	1200	2170	2340	4890	1190	2050	303	85
MIN	54	91	501	190	280	286	426	433	102	91	66	38
CFSM	.11	1.51	2.32	.68	.95	1.02	2.54	2.42	.48	.72	.19	.09
IN.	.13	1.69	2.68	.78	.99	1.17	2.84	2.79	.53	.83	.22	.10

CAL YR 1982 TOTAL 314551 MEAN 862 MAX 8990 MIN 43 CFSM 1.41 IN 19.18
WTR YR 1983 TOTAL 241868 MEAN 663 MAX 4890 MIN 38 CFSM 1.09 IN 14.75

04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW¼NW¼ sec.19, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank at downstream side of bridge on State Highway 427, 3 miles northwest of Cedarville, 5.8 miles upstream from mouth, and 10 miles south of Auburn.

DRAINAGE AREA.--270 mi².

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 241 ft³/s, 12.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,340 ft³/s Mar. 14, 1982, gage height, 12.98 ft; minimum daily, 13 ft³/s Oct. 3, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 3	2100	2020	6.64	May 3	0300	*4000	*10.59
Apr. 15	0500	2040	6.68				

Minimum daily discharge, 21 ft³/s Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	58	522	306	155	140	376	968	147	116	75	26
2	45	964	437	267	279	135	752	2760	133	151	54	26
3	41	1880	656	241	726	128	1780	3690	130	156	44	25
4	38	1580	1350	213	406	125	1340	2440	133	122	46	23
5	39	932	1620	196	276	123	821	1470	121	105	53	23
6	38	578	1730	183	224	121	620	984	157	89	45	27
7	37	403	1120	180	188	137	668	730	191	81	40	37
8	45	309	692	165	162	162	578	548	145	73	37	27
9	42	252	486	157	140	173	741	433	125	68	37	24
10	39	210	386	160	130	157	1410	366	113	66	36	23
11	36	186	331	173	120	142	1150	322	116	63	39	21
12	37	202	279	168	110	128	794	288	103	61	39	21
13	37	291	238	155	105	121	640	258	96	58	35	21
14	37	238	218	145	100	116	1490	241	87	56	32	22
15	36	196	213	137	105	114	1790	241	89	54	31	22
16	34	168	636	121	120	107	992	218	110	53	32	24
17	33	150	648	110	230	103	680	207	85	50	34	27
18	32	135	403	99	250	114	515	186	75	54	39	24
19	34	125	328	90	267	130	416	180	67	51	35	44
20	36	226	306	86	303	135	357	183	64	48	34	41
21	40	540	273	89	309	133	315	168	62	49	29	75
22	37	461	235	99	300	157	282	309	58	57	29	42
23	36	370	224	140	273	157	258	403	55	50	30	31
24	33	468	328	152	238	170	235	282	52	45	29	28
25	33	379	972	130	202	168	218	221	49	44	29	25
26	35	288	1550	116	168	168	199	194	46	44	29	25
27	36	288	972	107	152	353	188	168	44	42	31	26
28	36	360	960	99	142	1380	199	152	107	41	27	26
29	36	952	876	99	---	1210	221	152	211	40	26	25
30	31	821	522	152	---	734	507	180	148	42	26	24
31	37	---	376	213	---	496	---	160	---	103	27	---
TOTAL	1156	14010	19887	4748	6180	7737	20522	19102	3119	2132	1129	855
MEAN	37.3	467	642	153	221	250	684	616	104	68.8	36.4	28.5
MAX	50	1880	1730	306	726	1380	1790	3690	211	156	75	75
MIN	31	58	213	86	100	103	188	152	44	40	26	21
CFSM	.14	1.73	2.38	.57	.82	.93	2.53	2.28	.39	.26	.14	.11
IN.	.16	1.93	2.74	.65	.85	1.07	2.83	2.63	.43	.29	.16	.12

CAL YR 1982 TOTAL 159388 MEAN 437 MAX 5030 MIN 31 CFSM 1.62 IN 21.96
WTR YR 1983 TOTAL 100577 MEAN 276 MAX 3690 MIN 21 CFSM 1.02 IN 13.86

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW1/4 SW1/4 sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on right bank 10 ft downstream from bridge on U.S. Highway 27, 0.5 mile upstream from Holthouse ditch, 1.3 miles north of Decatur, and at mile 29.1.

DRAINAGE AREA.--621 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--37 years, 491 ft³/s, 10.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s Feb. 10, 11, 1959; maximum gage height, 24.40 ft Mar. 14, 1982; minimum daily discharge, 5.4 ft³/s Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	1100	3290	16.71
May 2	2300	*3680	*17.54

Minimum daily discharge, 10 ft³/s Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	59	644	1070	201	121	266	624	118	396	51	21
2	47	79	631	820	512	116	1110	3110	106	381	43	21
3	41	70	593	561	1570	108	2500	3630	101	246	38	23
4	33	50	700	370	1160	100	1600	3560	99	199	33	23
5	28	39	806	274	700	98	1130	3510	91	296	30	21
6	24	37	706	224	520	97	1170	3090	176	248	28	25
7	22	44	477	198	400	109	1610	2170	270	180	27	25
8	19	43	340	176	300	112	1770	1210	160	132	25	24
9	19	43	266	155	230	113	1450	775	112	107	25	23
10	19	39	208	151	180	119	1930	557	94	90	23	21
11	18	38	173	155	150	189	1870	447	81	79	33	20
12	19	44	139	146	140	228	1610	373	72	58	26	22
13	24	52	106	126	130	200	1260	301	66	46	24	23
14	27	49	90	119	125	163	2230	247	59	40	22	22
15	23	40	110	115	130	142	2780	221	60	36	22	22
16	20	34	515	80	195	125	2140	221	56	33	24	25
17	18	39	785	70	443	112	1810	204	49	36	29	22
18	17	44	637	65	468	109	1740	183	46	49	27	21
19	17	40	658	60	429	109	1380	176	63	60	25	22
20	18	54	799	55	378	106	925	171	68	42	23	23
21	15	104	743	50	310	195	643	148	60	33	23	26
22	13	140	619	55	266	371	466	195	52	29	22	24
23	13	173	628	110	240	464	351	397	48	27	24	25
24	13	343	806	189	208	563	283	290	50	25	24	23
25	12	376	1830	232	178	550	233	269	49	32	23	24
26	10	370	3200	240	151	464	201	304	44	30	22	26
27	11	414	2660	230	135	424	178	266	60	30	21	27
28	15	586	2550	220	125	631	185	206	468	29	20	26
29	20	1010	2330	204	---	504	191	178	642	28	21	25
30	23	777	1540	204	---	337	252	157	403	28	23	24
31	35	---	1220	224	---	296	---	136	---	44	24	---
TOTAL	669	5230	27509	6948	9974	7375	35264	27326	3823	3089	825	699
MEAN	21.6	174	887	224	356	238	1175	881	127	99.6	26.6	23.3
MAX	47	1010	3200	1070	1570	631	2780	3630	642	396	51	27
MIN	10	34	90	50	125	97	178	136	44	25	20	20
CFSM	.04	.28	1.43	.36	.57	.38	1.89	1.42	.21	.16	.04	.04
IN.	.04	.31	1.65	.42	.60	.44	2.11	1.64	.23	.19	.05	.04

CAL YR 1982 TOTAL 271454 MEAN 744 MAX 10200 MIN 10 CFSM 1.20 IN 16.26
WTR YR 1983 TOTAL 128731 MEAN 353 MAX 3630 MIN 10 CFSM .57 IN 7.71

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft downstream from Anthony Boulevard Extension, 0.8 mile downstream from Houk ditch, 5 miles south of Fort Wayne, and 10.8 miles upstream from mouth.

DRAINAGE AREA.--762 mi².

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available from the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Records good. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk ditch and Paul Trier ditch in to the Maumee River.

AVERAGE DISCHARGE.--53 years, 574 ft³/s, 10.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s Feb. 11, 1959; maximum gage height, 19.66 ft, Mar. 14, 1982; minimum daily discharge, 3.4 ft³/s Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 26	0500	4610	11.11	May 2	1300	*5140	*11.82
Apr. 15	1200	4200	[a]10.6				

[a] From graph.

Minimum daily discharge, 12 ft³/s Oct. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	69	716	1220	259	132	333	1090	144	394	60	27
2	35	139	655	978	497	129	1540	4950	125	493	66	24
3	47	114	671	674	1790	120	3610	5000	117	365	54	22
4	42	83	1130	462	1570	114	2540	4730	119	237	47	21
5	37	61	1200	335	800	110	1440	4430	117	276	41	23
6	30	51	1030	266	600	107	1360	4030	314	305	36	23
7	28	47	652	229	470	115	1700	2850	413	238	35	26
8	27	51	443	202	360	122	2100	1490	293	169	34	29
9	24	51	337	176	270	123	1700	919	178	127	33	26
10	23	51	268	163	220	119	2200	633	136	103	32	27
11	22	49	216	167	180	139	2400	499	112	89	35	24
12	22	52	176	163	160	212	2100	425	96	77	42	23
13	24	58	138	144	150	216	2000	349	86	61	35	22
14	28	59	110	131	145	181	2200	291	84	51	32	26
15	33	58	130	120	150	156	4100	250	79	47	28	25
16	33	51	594	100	180	136	3600	237	80	42	28	25
17	27	46	930	87	400	123	2300	229	73	37	31	28
18	24	46	752	82	556	119	2100	204	63	39	37	28
19	20	52	680	78	516	120	1600	198	58	51	35	24
20	21	68	813	70	467	115	1100	193	72	53	29	26
21	21	102	826	65	390	132	800	172	75	42	28	31
22	22	156	680	70	325	300	600	325	67	36	27	33
23	18	183	658	110	287	428	450	462	61	34	27	31
24	15	307	1140	196	250	533	350	402	59	32	27	29
25	15	390	2750	259	212	579	300	305	60	32	28	28
26	16	369	4560	282	176	536	240	325	57	36	27	28
27	13	405	4060	265	151	699	212	311	52	35	27	30
28	12	618	3680	250	138	967	208	253	185	35	25	33
29	16	1150	3130	257	---	775	225	210	697	35	24	32
30	23	982	2040	255	---	486	456	193	587	34	24	30
31	40	---	1410	280	---	379	---	168	---	36	28	---
TOTAL	789	5918	36575	8136	11669	8522	45864	36123	4659	3641	1062	804
MEAN	25.5	197	1180	262	417	275	1529	1165	155	117	34.3	26.8
MAX	47	1150	4560	1220	1790	967	4100	5000	697	493	66	33
MIN	12	46	110	65	138	107	208	168	52	32	24	21
CFSM	.03	.26	1.55	.34	.55	.36	2.01	1.53	.20	.15	.05	.04
IN.	.04	.29	1.79	.40	.57	.42	2.24	1.76	.23	.18	.05	.04

CAL YR 1982 TOTAL 341063 MEAN 934 MAX 10500 MIN 12 CFSM 1.23 IN 16.65
WTR YR 1983 TOTAL 163762 MEAN 449 MAX 5000 MIN 12 CFSM .59 IN 7.99

04182590 HARBER DITCH AT FORT WAYNE, IN

LOCATION.--Lat 41°00'27", long 85°10'58", in NE1/4 SW1/4 sec.33, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 50 ft upstream from bridge on Baer Road in Fort Wayne, 3.2 miles upstream from mouth. The stream name changes to Fairfield ditch 0.7 mile downstream at bridge on Lower Huntington Road.

DRAINAGE AREA.--21.9 mi².

PERIOD OF RECORD.--May 1964 to current year. Discharge measurements available October 1960 to May 1964 and gage heights January 1961 to May 1964 at site 0.7 mile downstream.

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair above 1.0 ft³/s and poor below.

AVERAGE DISCHARGE.--19 years, 18.0 ft³/s, 11.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 916 ft³/s June 13, 1981; maximum gage height, 12.25 ft Mar. 14, 1982; minimum daily discharge, 0.06 ft³/s Oct. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 1	2100	259	6.47	Apr. 2	1615	400	8.00
Dec. 25	1545	590	9.60	May 2	0300	*688	*10.27

Minimum daily discharge, 0.22 ft³/s Oct. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	69	20	15	9.8	3.7	13	178	8.5	9.8	1.0	.57
2	.65	60	21	12	55	3.5	228	464	6.2	15	.80	.54
3	.55	10	73	9.8	61	3.4	148	151	12	3.7	.63	.60
4	.45	4.6	153	8.0	22	3.3	65	80	12	8.9	8.0	.54
5	.40	3.5	119	7.6	9.0	3.2	36	43	16	4.1	2.9	.50
6	.35	3.0	64	6.5	7.0	3.7	32	28	114	2.5	1.1	1.6
7	.45	2.8	28	6.5	5.5	5.5	48	21	40	1.9	.70	2.0
8	.38	3.0	17	4.9	4.5	4.9	31	18	15	1.6	.60	.94
9	.60	2.8	11	4.6	4.0	3.5	68	14	13	1.4	.56	.68
10	.55	2.8	9.0	5.5	3.5	3.1	74	13	5.8	1.2	.52	.60
11	.42	6.5	7.0	5.8	3.3	2.9	65	11	4.6	1.2	3.2	.55
12	.37	27	6.0	4.6	3.0	2.6	40	10	4.1	1.1	.80	.52
13	.35	13	5.2	4.1	2.9	2.4	55	9.8	3.7	.90	.62	.51
14	.32	8.0	4.8	4.1	3.0	2.3	157	9.3	3.1	.80	.55	.50
15	.31	6.0	23	3.1	3.5	2.2	53	9.8	3.1	.75	.50	.51
16	.30	4.5	91	2.6	5.0	2.2	27	7.6	2.5	.67	.50	1.3
17	.29	3.7	36	2.4	7.5	2.2	21	6.2	2.1	.61	3.2	.83
18	.29	3.3	18	2.2	8.0	8.9	17	6.2	2.0	.59	1.2	.47
19	.28	3.7	14	2.1	11	4.5	13	16	1.9	.58	.77	.66
20	.60	36	12	2.0	12	4.0	10	13	1.7	.57	.62	4.8
21	.35	42	8.5	2.0	11	3.8	8.5	8.5	1.6	.63	.60	1.0
22	.30	20	6.9	6.0	9.0	3.6	7.3	76	1.6	.58	.56	.65
23	.27	52	14	13	7.0	3.3	7.3	55	1.3	.56	.54	.58
24	.26	25	113	8.9	6.0	3.1	6.9	28	1.4	.55	.51	.55
25	.25	12	333	6.2	5.0	3.0	6.2	20	1.3	.80	.51	.52
26	.24	20	181	5.2	4.5	3.0	5.2	16	1.3	.66	.55	.51
27	.24	14	108	4.9	4.0	60	5.8	14	1.6	.60	.53	.50
28	.23	65	158	4.4	3.8	74	18	12	1.8	.57	.52	.50
29	.23	40	62	4.6	---	32	11	14	1.4	.56	.52	.50
30	.22	22	30	15	---	18	100	11	3.5	.55	.66	.50
31	15	---	20	12	---	14	---	9.3	---	2.0	.60	---
TOTAL	26.30	585.2	1766.4	195.6	290.8	289.8	1377.2	1372.7	288.1	65.93	34.87	25.03
MEAN	.85	19.5	57.0	6.31	10.4	9.35	45.9	44.3	9.60	2.13	1.12	.83
MAX	15	69	333	15	61	74	228	464	114	15	8.0	4.8
MIN	.22	2.8	4.8	2.0	2.9	2.2	5.2	6.2	1.3	.55	.50	.47
CFSM	.04	.89	2.60	.29	.48	.43	2.10	2.02	.44	.10	.05	.04
IN.	.04	.99	3.00	.33	.49	.49	2.34	2.33	.49	.11	.06	.04

CAL YR 1982 TOTAL 9851.45 MEAN 27.0 MAX 790 MIN .22 CFSM 1.23 IN 16.73
WTR YR 1983 TOTAL 6317.93 MEAN 17.3 MAX 464 MIN .22 CFSM .79 IN 10.73

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE$^1/_4$ NE$^1/_4$ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, on left bank 600 ft upstream from bridge on Landin Road, 1,400 ft upstream from the Norfolk and Western Railroad bridge, 1.1 miles northwest of New Haven, 2.8 miles upstream from Sixmile Creek and at mile 129.0.

DRAINAGE AREA.--1,967 mi^2.

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1956, nonrecording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles upstream from station. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--27 years (1956 to current year), 1,645 ft^3/s, 11.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft^3/s Mar. 17, 1982, gage height, 25.49 ft; minimum daily, 48 ft^3/s Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 3	0100	*13400	*18.56

Minimum daily discharge, 99 ft^3/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	728	3610	3960	1010	897	3690	4480	986	2050	392	133
2	219	5580	3300	3320	1570	772	5590	11600	932	2840	342	159
3	205	4850	3640	2490	3830	739	8780	13300	974	2960	480	131
4	245	4590	5980	1940	3970	675	8230	12900	874	3030	553	103
5	200	3750	6670	1600	2660	702	6120	11800	817	2410	426	99
6	198	3040	6450	1390	2100	629	5230	10900	1640	1540	329	147
7	128	2370	5490	1260	1900	712	5350	9590	1540	1100	270	193
8	151	1940	4450	1160	1600	712	5550	7220	1160	777	197	170
9	168	1470	3820	1050	1300	723	5350	5190	1120	702	204	125
10	214	1090	3380	993	1100	817	6600	4070	886	556	209	106
11	151	862	2730	993	930	968	6900	3280	1270	525	237	101
12	162	1040	2120	1000	840	999	6080	2660	930	503	232	100
13	145	999	1610	980	740	1040	5390	2320	632	358	175	123
14	148	1120	1360	944	690	817	7460	2060	598	355	166	110
15	151	1110	1350	897	442	761	8600	1750	640	340	207	102
16	203	1260	3010	800	464	805	7720	1520	641	282	224	101
17	171	999	3690	650	822	492	6210	1440	591	316	192	138
18	168	999	3130	520	1790	670	5510	1290	370	248	219	116
19	393	856	2720	480	1900	573	4960	1290	480	212	198	100
20	120	1160	2580	480	2130	686	4240	1280	443	302	160	125
21	162	1980	2500	520	2080	739	3240	1120	389	183	153	150
22	150	2290	2190	580	1980	862	2510	2670	395	273	140	140
23	140	2470	2040	700	1860	1160	2080	2480	339	237	175	158
24	125	2890	2910	862	1750	1340	1790	2160	344	248	111	160
25	130	2830	6180	874	1550	1480	1450	1860	345	538	106	170
26	140	2540	9220	862	1230	1500	1420	1690	257	542	162	210
27	145	2370	8600	851	1250	2290	1280	1610	295	272	111	144
28	159	3030	8190	805	891	4940	1300	1350	436	339	128	132
29	183	4340	7470	778	---	5250	1280	1170	1290	201	122	128
30	171	4370	5970	915	---	4450	2070	1140	1520	279	114	129
31	398	---	4690	1050	---	3940	---	1100	---	664	165	---
TOTAL	5693	68923	131050	35704	44379	43140	141980	128290	23134	25182	6899	4003
MEAN	184	2297	4227	1152	1585	1392	4733	4138	771	812	223	133
MAX	398	5580	9220	3960	3970	5250	8780	13300	1640	3030	553	210
MIN	120	728	1350	480	442	492	1280	1100	257	183	106	99
CFSM	.09	1.17	2.15	.59	.81	.71	2.41	2.10	.39	.41	.11	.07
IN.	.11	1.30	2.48	.68	.84	.82	2.69	2.43	.44	.48	.13	.08

CAL YR 1982 TOTAL 1041344 MEAN 2853 MAX 26300 MIN 120 CFSM 1.45 IN 19.69
WTR YR 1983 TOTAL 658377 MEAN 1804 MAX 13300 MIN 99 CFSM .92 IN 12.45

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼NE¼ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on county highway named " New Road", 2.7 miles upstream from Little Kankakee River, 4 miles northwest of North Liberty, and at mile 126.9.

DRAINAGE AREA.--174 mi², of which 58.2 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good below 250 cfs and fair above due to varying backwater conditions.

AVERAGE DISCHARGE.--32 years, 151 ft³/s, 11.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 908 ft³/s Mar. 17, 1982, gage height 9.01 ft; maximum gage height, 9.04 ft June 27, 1968; minimum daily discharge, 46 ft³/s Sept. 9, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 740 ft³/s May 2, gage height, 7.71 ft; minimum daily, 65 ft³/s Sept. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	118	221	202	154	145	211	395	227	173	141	69
2	101	214	208	194	166	143	302	685	221	233	130	65
3	99	250	374	188	207	141	473	647	219	230	122	65
4	98	207	538	183	198	140	403	562	218	197	116	67
5	98	180	515	179	185	138	321	482	213	177	113	69
6	99	165	538	176	180	136	288	416	211	166	112	70
7	110	156	462	175	174	143	293	379	206	155	115	70
8	107	150	390	170	166	153	285	396	201	149	109	70
9	105	143	334	168	164	151	264	352	196	150	102	66
10	106	140	297	170	159	148	274	326	194	148	102	69
11	104	146	271	173	155	144	277	302	194	137	103	73
12	103	199	248	169	151	143	259	287	189	129	101	69
13	103	202	232	165	150	141	283	276	181	122	100	68
14	104	181	222	164	150	138	525	272	175	116	99	76
15	106	166	217	160	153	136	554	262	179	116	92	78
16	101	158	222	157	160	132	453	252	175	117	79	88
17	100	152	224	156	173	131	379	246	167	124	99	95
18	100	147	219	153	177	134	323	241	168	121	104	93
19	100	144	215	150	178	139	289	268	168	122	103	124
20	109	175	212	148	173	140	262	279	162	128	96	128
21	110	213	203	148	169	146	244	258	157	122	93	153
22	107	207	197	152	166	143	233	284	150	110	85	135
23	105	201	195	157	163	142	224	301	148	108	78	125
24	104	216	203	159	159	142	216	276	146	114	79	115
25	105	199	270	161	154	142	209	266	146	106	79	112
26	104	184	303	158	150	140	198	251	150	100	80	112
27	103	174	263	153	148	164	199	242	150	102	87	105
28	104	192	277	150	146	306	205	237	166	102	89	105
29	105	259	261	149	---	298	207	239	171	106	73	104
30	104	245	229	155	---	255	316	237	161	178	69	100
31	106	---	212	157	---	227	---	233	---	150	71	---
TOTAL	3212	5483	8772	5099	4628	4921	8969	10149	5409	4308	3021	2738
MEAN	104	183	283	164	165	159	299	327	180	139	97.5	91.3
MAX	110	259	538	202	207	306	554	685	227	233	141	153
MIN	98	118	195	148	146	131	198	233	146	100	69	65
CFSM	.60	1.05	1.63	.94	.95	.91	1.72	1.88	1.03	.80	.56	.53
IN.	.69	1.17	1.88	1.09	.99	1.05	1.92	2.17	1.16	.92	.65	.59

CAL YR 1982 TOTAL 74875 MEAN 205 MAX 903 MIN 93 CFSM 1.18 IN 16.01
WTR YR 1983 TOTAL 66709 MEAN 183 MAX 685 MIN 65 CFSM 1.05 IN 14.26

05515400 KINGSBURY CREEK NEAR LAPORTE, IN

LOCATION.--Lat 41°32'49", long 86°43'48", in SW¼SE¼ sec.23, T.36 N., R.3 W., LaPorte County, Hydrologic Unit 07120001, on left bank at upstream side of bridge on County Road 400 South, 0.5 mile east of State Highway 39, 1.5 miles west of U.S. Highway 35, and 3 miles south of LaPorte city limits.

DRAINAGE AREA.--7.08 mi², of which 4.07 mi² does not contribute directly to surface run-off.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-83-1: (M).

GAGE.--Water-stage recorder. Datum of gage is 753.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--13 years, 4.22 ft³/s, 8.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 306 ft³/s (revised) July 26, 1981, gage height, 6.83 ft from rating curve extended above 20 ft³/s on the basis of contracted-opening measurement at gage height 6.18 ft; minimum daily, 0.83 ft³/s Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height t (ft)
Apr. 30	0600	40	5.13	May 19	1000	34	5.02
May 1	2300	*94	*5.75	July 2	0500	72	5.54

Minimum daily discharge, 2.0 ft³/s Sept. 9-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.4	4.9	5.1	4.3	4.3	5.9	14	6.7	5.9	3.8	2.3
2	2.7	9.5	4.6	5.0	7.7	4.2	19	22	6.4	26	3.4	2.2
3	2.7	5.3	14	4.9	7.6	4.2	9.1	12	6.3	8.8	3.3	2.2
4	2.7	4.2	8.4	4.8	6.1	4.2	6.6	9.4	6.3	6.9	3.2	2.1
5	2.6	3.8	9.3	4.6	5.3	4.2	6.0	8.3	6.1	6.1	3.2	2.1
6	2.7	3.4	8.2	4.6	5.1	4.2	6.3	8.1	6.0	5.6	3.1	2.2
7	3.2	3.4	6.4	4.8	5.0	4.9	7.9	9.4	5.9	5.2	3.1	2.2
8	2.9	3.2	5.8	4.6	4.9	5.7	6.7	9.3	5.6	5.0	3.0	2.1
9	3.1	3.1	5.6	4.6	4.7	5.0	7.7	8.0	5.0	4.9	2.8	2.0
10	3.1	3.1	5.4	4.8	4.7	4.9	8.4	7.6	4.5	4.8	2.8	2.0
11	2.9	5.0	5.3	4.9	4.6	4.7	7.7	7.3	4.3	4.7	2.9	2.0
12	2.8	6.0	5.1	4.6	4.4	4.6	6.7	7.1	4.3	4.5	2.9	2.0
13	2.8	4.3	4.9	4.4	4.3	4.5	12	7.0	4.2	4.3	2.8	2.0
14	2.8	3.9	4.8	4.3	4.4	4.4	17	8.2	4.1	4.3	2.7	2.0
15	2.8	3.5	5.2	4.3	4.7	4.3	9.5	7.2	4.1	4.3	2.7	2.0
16	2.7	3.4	5.5	4.3	4.9	4.3	8.2	6.8	4.1	4.3	2.7	2.3
17	2.7	3.4	5.2	4.3	5.3	4.3	8.1	6.6	4.0	4.2	5.4	2.3
18	2.7	3.4	5.1	4.2	5.2	4.8	7.6	6.5	3.8	4.5	3.4	2.2
19	2.7	3.8	5.1	4.0	5.1	6.3	7.4	15	3.8	4.5	3.0	3.4
20	3.3	10	5.0	3.8	5.1	5.5	7.0	9.3	3.8	5.0	2.8	3.8
21	2.9	7.2	4.8	3.8	4.9	5.4	7.0	7.7	3.6	4.3	2.7	4.4
22	2.9	5.2	4.6	4.2	4.9	5.3	6.9	12	3.6	4.0	2.7	3.4
23	2.8	5.8	4.7	4.8	4.9	5.2	6.7	8.7	3.4	3.9	2.6	3.1
24	2.7	5.2	5.2	4.8	4.7	5.1	6.5	7.6	3.4	3.9	2.5	3.0
25	2.7	4.4	11	4.7	4.6	5.0	6.3	7.1	3.4	3.7	2.4	2.9
26	2.7	4.3	6.3	4.4	4.4	4.9	6.3	6.9	3.3	3.6	2.5	3.1
27	2.7	4.3	5.7	4.2	4.3	7.1	6.1	6.6	3.3	3.4	2.5	3.0
28	2.7	6.9	7.6	4.1	4.3	9.4	7.7	6.6	3.8	3.4	2.4	2.9
29	2.7	6.4	6.2	4.1	---	6.5	7.5	7.2	3.7	3.2	2.3	2.8
30	2.7	5.3	5.5	4.9	---	5.2	18	7.2	3.8	3.6	2.3	2.7
31	2.9	---	5.2	4.6	---	5.1	---	7.0	---	5.1	2.3	---
TOTAL	86.9	145.1	190.6	139.5	140.4	157.7	253.8	273.7	134.6	165.9	90.2	76.7
MEAN	2.80	4.84	6.15	4.50	5.01	5.09	8.46	8.83	4.49	5.35	2.91	2.56
MAX	3.3	10	14	5.1	7.7	9.4	19	22	6.7	26	5.4	4.4
MIN	2.6	3.1	4.6	3.8	4.3	4.2	5.9	6.5	3.3	3.2	2.3	2.0
CFSM	.40	.68	.87	.64	.71	.72	1.20	1.25	.63	.76	.41	.36
IN.	.46	.76	1.00	.73	.74	.83	1.33	1.44	.71	.87	.47	.40

CAL YR 1982 TOTAL 2261.9 MEAN 6.20 MAX 52 MIN 2.6 CFSM .88 IN 11.88
WTR YR 1983 TOTAL 1855.1 MEAN 5.08 MAX 26 MIN 2.0 CFSM .72 IN 9.75

05515500 KANKAKEE RIVER AT DAVIS, IN

LOCATION.--Lat 41°24'00", long 86°42'04", in SE¼NE¼ sec.13, T.34 N., R.3 W., Starke County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on U.S. Highway 30 at Davis, 0.5 mile downstream from Mill Creek, 4 miles east of Hanna, and at mile 110.9.

DRAINAGE AREA.--537 mi², of which 137 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1905 to July 1906 and October 1924 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1338: 1953. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 664.68 ft National Geodetic Vertical Datum of 1929. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mile downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--59 years, (1924 to current year), 503 ft³/s, 12.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft³/s Mar. 20, 1982; maximum gage height, 12.98 ft Mar. 17, 1982; minimum daily discharge, 154 ft³/s Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,730 ft³/s May 3; gage height, 12.86 ft; minimum daily, 284 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	432	449	855	780	612	552	777	1180	748	512	494	300
2	424	709	808	750	633	550	927	1550	721	1060	460	295
3	415	911	1010	724	744	548	1240	1720	707	1230	438	290
4	407	860	1370	700	752	549	1250	1690	708	1090	420	286
5	406	759	1460	687	707	545	1160	1610	696	959	404	289
6	407	689	1530	673	677	538	1090	1510	683	846	384	298
7	436	634	1500	668	659	551	1080	1390	666	767	385	298
8	439	597	1410	657	638	610	1080	1370	648	704	376	292
9	434	578	1280	651	625	618	1030	1290	632	652	363	288
10	437	563	1180	648	614	593	1030	1190	618	616	353	284
11	427	568	1100	658	599	574	1030	1100	606	584	361	293
12	421	705	1020	648	584	559	997	1030	593	549	361	297
13	417	769	949	634	573	554	992	978	582	516	352	297
14	414	727	898	628	571	547	1250	957	571	496	343	294
15	416	668	875	628	579	536	1480	922	566	484	338	305
16	414	629	871	611	588	527	1460	878	574	477	323	316
17	409	604	858	604	606	519	1380	843	553	473	379	326
18	405	580	831	598	623	527	1260	817	537	468	440	330
19	403	566	813	583	628	569	1170	858	528	468	395	376
20	414	638	793	579	621	581	1090	933	522	487	374	415
21	426	761	764	576	613	591	1020	884	512	484	358	453
22	420	789	738	584	604	588	957	895	497	462	348	444
23	412	771	726	612	600	582	917	975	488	447	336	412
24	409	799	732	625	589	587	872	937	478	440	331	394
25	414	776	827	627	575	580	829	877	469	437	325	378
26	411	730	952	623	564	576	797	829	468	414	320	376
27	407	702	928	608	562	620	769	787	468	406	325	376
28	404	721	927	595	555	848	781	762	483	402	326	379
29	403	875	946	587	---	948	802	771	501	399	324	372
30	401	904	881	604	---	892	967	786	497	476	313	367
31	411	---	824	620	---	826	---	764	---	511	311	---
TOTAL	12895	21031	30656	19770	17295	18785	31484	33083	17320	18316	11360	10120
MEAN	416	701	989	638	618	606	1049	1067	577	591	366	337
MAX	439	911	1530	780	752	948	1480	1720	748	1230	494	453
MIN	401	449	726	576	555	519	769	762	468	399	311	284
CFSM	.78	1.31	1.84	1.19	1.15	1.13	1.95	1.99	1.07	1.10	.68	.63
IN.	.89	1.46	2.12	1.37	1.20	1.30	2.18	2.29	1.20	1.27	.79	.70

CAL YR 1982 TOTAL 266881 MEAN 731 MAX 1920 MIN 364 CFSM 1.36 IN 18.49
WTR YR 1983 TOTAL 242115 MEAN 663 MAX 1720 MIN 284 CFSM 1.24 IN 16.77

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE¼NW¼ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft upstream from LaPorte Street footbridge in Plymouth, 1.1 miles downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles upstream from Wolf Creek, and at mile 40.3.

DRAINAGE AREA.--294 mi^2, of which 22 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WDR IN-73-1: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--35 years, 259 ft^3/s, 11.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft^3/s Oct. 12, 13, 1954, gage height, 17.13 ft; minimum daily, 13 ft^3/s Dec. 3, 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,270 ft^3/s May 4, gage height, 12.80 ft; minimum daily, 30 ft^3/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	80	688	314	140	148	508	1040	220	123	181	39
2	47	611	477	279	228	144	860	1570	196	541	117	37
3	44	955	863	251	655	140	1440	1990	195	518	96	36
4	44	976	1360	225	502	137	1760	2240	205	253	93	35
5	44	694	1800	211	286	135	1660	2040	177	176	88	34
6	43	314	1990	201	251	137	1280	1550	171	141	82	33
7	42	226	1950	200	228	184	1070	1110	173	121	72	33
8	43	190	1650	185	201	249	1090	1070	158	109	66	33
9	48	174	1210	174	193	253	955	1210	148	101	62	33
10	53	156	780	176	181	214	849	1020	149	95	59	32
11	48	156	532	190	168	193	879	634	151	92	58	32
12	46	292	418	190	157	177	799	468	129	84	55	31
13	45	374	342	174	149	168	767	387	122	80	51	30
14	44	314	293	168	148	164	1350	357	117	77	48	30
15	44	240	275	165	174	157	1850	332	119	76	46	30
16	43	195	348	152	213	145	2070	286	119	75	46	31
17	41	185	409	148	264	140	1900	246	113	73	56	31
18	39	167	352	138	284	146	1490	228	106	70	56	31
19	39	159	317	121	281	176	1100	233	101	73	49	88
20	45	232	296	122	271	182	721	246	97	76	47	90
21	43	520	266	126	258	184	534	221	95	76	43	82
22	43	541	240	127	246	196	429	290	90	75	43	68
23	42	431	235	140	237	201	357	551	87	71	42	56
24	40	574	267	144	218	218	319	429	86	63	41	48
25	40	465	617	146	196	223	284	300	80	56	41	43
26	39	326	963	131	174	214	260	251	78	56	41	41
27	36	292	958	126	162	367	240	220	76	57	41	41
28	35	365	815	119	160	981	247	201	88	58	41	41
29	33	788	950	117	---	1310	258	255	92	74	41	39
30	35	928	685	134	---	1190	574	352	90	374	39	36
31	44	---	384	154	---	772	---	255	---	393	39	---
TOTAL	1320	11920	22730	5248	6625	9245	27900	21582	3828	4307	1880	1264
MEAN	42.6	397	733	169	237	298	930	696	128	139	60.6	42.1
MAX	53	976	1990	314	655	1310	2070	2240	220	541	181	90
MIN	33	80	235	117	140	135	240	201	76	56	39	30
CFSM	.15	1.35	2.49	.58	.81	1.01	3.16	2.37	.44	.47	.21	.14
IN.	.17	1.51	2.88	.66	.84	1.17	3.53	2.73	.48	.54	.24	.16

CAL YR 1982 TOTAL 148321 MEAN 406. MAX 4630 MIN 33 CFSM 1.38 IN 18.77
WTR YR 1983 TOTAL 117849 MEAN 323 MAX 2240 MIN 30 CFSM 1.10 IN 14.91

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW¼SW¼ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles downstream from Eagle Creek, and at mile 11.6.

DRAINAGE AREA.--435 mi^2, of which 51 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). August 1905 to July 1906, nonrecording gage at same site at different datum. August 1943 to July 17, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--40 years (water years 1944 to current year), 395 ft^3/s , 12.33 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft^3/s Oct. 15, 16, 1954, gage height, 13.75 ft; minimum daily, 50 ft^3/s Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,400 ft^3/s May 5, gage height, 9.40 ft; minimum daily, 107 ft^3/s Sept. 12, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	147	925	638	325	303	950	893	491	263	467	122
2	125	385	825	550	333	296	825	1480	452	1220	321	120
3	123	772	801	507	489	292	1130	1880	434	1560	257	119
4	121	912	1060	471	726	289	1440	2090	438	1170	229	117
5	123	977	1440	444	632	289	1640	2330	429	743	219	114
6	122	837	1800	431	480	285	1680	2280	406	563	209	113
7	124	521	2030	422	439	318	1500	1940	398	477	195	115
8	124	414	2060	418	414	372	1210	1620	387	428	181	114
9	131	364	1870	397	389	418	1120	1450	370	385	172	111
10	136	333	1560	385	364	418	1060	1450	352	359	164	109
11	136	318	1090	385	349	376	977	1340	349	339	169	108
12	131	345	789	385	329	352	950	957	339	316	169	107
13	131	498	654	385	318	329	918	743	313	298	160	107
14	128	596	570	372	310	318	1060	703	302	284	155	107
15	128	489	540	360	310	296	1570	692	305	274	150	108
16	128	401	545	352	345	296	1780	648	302	271	148	118
17	131	356	601	337	385	296	2080	580	293	270	165	119
18	126	329	622	329	426	303	2080	540	283	261	189	119
19	123	310	575	318	444	333	1770	536	276	258	173	131
20	126	322	540	292	439	352	1450	531	267	247	163	195
21	131	422	512	289	431	372	986	521	257	246	156	211
22	131	611	475	296	418	364	788	517	246	235	149	191
23	128	643	453	310	405	368	700	616	239	225	146	176
24	128	601	462	322	393	372	632	731	230	217	140	169
25	126	670	570	322	364	380	590	664	224	211	133	156
26	128	601	831	314	341	380	555	550	218	206	134	146
27	133	503	1020	307	318	457	517	497	219	198	135	141
28	126	484	1130	296	307	627	507	465	232	188	135	136
29	123	611	1020	289	---	990	521	467	242	179	128	131
30	123	825	1040	299	---	1240	616	520	243	205	124	130
31	128	---	887	314	---	1280	---	561	---	419	123	---
TOTAL	3949	15597	29297	11536	11223	13361	33602	30792	9536	12515	5558	3960
MEAN	127	520	945	372	401	431	1120	993	318	404	179	132
MAX	136	977	2060	638	726	1280	2080	2330	491	1560	467	211
MIN	121	147	453	289	307	285	507	465	218	179	123	107
CFSM	.29	1.20	2.17	.86	.92	.99	2.58	2.28	.73	.93	.41	.30
IN.	.34	1.33	2.51	.99	.96	1.14	2.87	2.63	.82	1.07	.48	.34

CAL YR 1982 TOTAL 212368 MEAN 582 MAX 5250 MIN 121 CFSM 1.34 IN 18.16
WTR YR 1983 TOTAL 180926 MEAN 496 MAX 2330 MIN 107 CFSM 1.14 IN 15.47

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'17", long 86°57'52", in NE¼SE¼ sec.15, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank at downstream side of abandoned bridge at Dunns Bridge, 1.8 miles north of Tefft, 3.6 miles upstream from Davis ditch, and at mile 90.8.

DRAINAGE AREA.--1,352 mi^2, of which 192 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1728: 1954(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 1,326 ft^3/s, 13.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,870 ft^3/s Mar. 23, 1982; maximum gage height, 13.38 ft Mar. 20, 1982; minimum daily discharge, 280 ft^3/s Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft^3/s May 6; gage height, 12.06 ft; minimum daily, 594 ft^3/s Oct. 25, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	649	682	2370	2520	1450	1310	2600	2860	2160	1180	1330	686
2	641	1040	2420	2310	1500	1300	2660	3330	2070	1870	1250	667
3	632	1680	2650	2140	1660	1290	2930	3740	2000	2970	1090	614
4	614	2030	3000	2030	1850	1280	3100	4090	1940	3290	1010	611
5	605	2180	3220	1940	1940	1270	3240	4320	1910	3340	971	612
6	610	2180	3400	1880	1870	1270	3390	4460	1860	3190	932	615
7	658	1990	3580	1820	1760	1290	3510	4420	1820	2940	906	625
8	702	1710	3700	1770	1670	1390	3560	4410	1750	2630	881	624
9	688	1550	3780	1720	1600	1470	3530	4360	1680	2350	856	616
10	684	1460	3810	1700	1560	1490	3460	4220	1630	2110	829	609
11	677	1420	3730	1690	1510	1450	3390	4070	1580	1930	829	605
12	658	1530	3560	1670	1450	1390	3310	3880	1530	1760	829	609
13	651	1690	3310	1630	1400	1340	3250	3650	1480	1590	812	611
14	641	1790	3060	1600	1380	1310	3340	3490	1430	1460	789	610
15	639	1760	2860	1570	1370	1290	3500	3310	1400	1390	775	616
16	641	1620	2690	1530	1390	1270	3650	3150	1390	1350	758	632
17	618	1510	2570	1500	1430	1240	3830	2990	1350	1290	786	651
18	609	1440	2500	1460	1480	1260	4000	2830	1300	1300	913	651
19	607	1390	2430	1410	1530	1340	4100	2760	1270	1330	903	680
20	616	1440	2350	1370	1540	1410	4110	2750	1240	1370	849	758
21	629	1600	2250	1380	1530	1460	3950	2690	1220	1310	812	820
22	623	1800	2170	1400	1520	1460	3650	2630	1180	1240	784	843
23	603	1960	2100	1440	1490	1450	3370	2620	1140	1160	761	811
24	598	2030	2060	1470	1470	1460	3150	2630	1110	1120	747	782
25	594	2040	2140	1480	1430	1450	2950	2620	1080	1070	733	761
26	597	2030	2320	1480	1390	1450	2780	2530	1060	1050	725	755
27	594	1940	2500	1450	1350	1500	2610	2410	1050	1010	730	749
28	598	1900	2640	1420	1330	1780	2520	2300	1100	1010	730	746
29	596	2050	2730	1390	---	2150	2500	2240	1160	954	725	737
30	598	2240	2720	1400	---	2380	2610	2200	1170	974	708	726
31	609	---	2680	1430	---	2540	---	2190	---	1160	695	---
TOTAL	19479	51682	87300	51000	42850	45740	98550	100150	44060	52698	26448	20432
MEAN	628	1723	2816	1645	1530	1475	3285	3231	1469	1700	853	681
MAX	702	2240	3810	2520	1940	2540	4110	4460	2160	3340	1330	843
MIN	594	682	2060	1370	1330	1240	2500	2190	1050	954	695	605
CFSM	.46	1.27	2.08	1.22	1.13	1.09	2.43	2.39	1.09	1.26	.63	.50
IN.	.54	1.42	2.40	1.40	1.18	1.26	2.71	2.76	1.21	1.45	.73	.56

CAL YR 1982 TOTAL 669331 MEAN 1834 MAX 5850 MIN 548 CFSM 1.36 IN 18.42
WTR YR 1983 TOTAL 640389 MEAN 1754 MAX 4460 MIN 594 CFSM 1.30 IN 17.62

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank, 20 ft downstream from bridge on State Highway 49, 4.5 miles south of Kouts, 0.7 mile upstream from Cook ditch, and at mile 86.7.

DRAINAGE AREA.--1,376 mi², of which 194 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IN-77-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--9 years, 1,493 ft³/s, 14.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,420 ft³/s Mar. 24, 1982, gage height, 14.52 ft; minimum daily, 335 ft³/s Sept. 12, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,220 ft³/s May 6, gage height, 12.83 ft; minimum daily, 495 ft³/s Sept. 4, 5.

NOTE.--No gage-height record Feb. 1 to Mar. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	669	2240	2680	1530	1350	2700	3280	2130	1180	1280	582
2	684	961	2280	2490	1670	1330	2860	3590	2050	1860	1280	576
3	694	1510	2600	2280	1800	1310	3140	3850	1980	2950	1110	518
4	652	1870	3060	2150	1920	1290	3250	4030	1900	3430	988	495
5	634	2020	3250	2070	2000	1270	3340	4130	1860	3530	938	495
6	632	2000	3420	2020	1930	1280	3460	4210	1810	3300	866	500
7	692	1830	3560	1950	1870	1350	3540	4190	1780	2960	879	529
8	746	1590	3640	1880	1780	1440	3620	4160	1720	2570	824	530
9	750	1440	3740	1830	1690	1530	3600	4130	1640	2280	771	520
10	720	1370	3720	1800	1630	1570	3540	4020	1590	2050	771	513
11	703	1350	3690	1790	1580	1550	3430	3920	1540	1930	798	507
12	687	1440	3600	1760	1500	1490	3340	3840	1500	1760	795	510
13	677	1540	3410	1730	1460	1420	3180	3720	1480	1580	768	511
14	671	1620	3220	1680	1420	1380	3240	3580	1450	1420	708	511
15	663	1610	3020	1660	1400	1350	3420	3410	1400	1330	728	518
16	717	1500	2760	1630	1440	1340	3600	3210	1410	1280	700	536
17	702	1410	2550	1600	1480	1310	3760	3100	1370	1230	689	558
18	691	1390	2660	1550	1510	1310	3870	2940	1290	1210	885	562
19	642	1350	2570	1510	1550	1380	3920	2890	1240	1260	900	591
20	636	1350	2340	1490	1600	1450	3910	2880	1210	1300	824	679
21	653	1470	2100	1510	1590	1480	3820	2800	1170	1280	734	764
22	641	1630	2050	1530	1570	1490	3670	2740	1120	1160	694	802
23	606	1790	2020	1550	1550	1490	3470	2700	1100	1090	670	762
24	599	1860	2000	1540	1510	1500	3290	2680	1070	1050	646	695
25	600	1880	2150	1530	1480	1500	3100	2650	1030	1000	627	692
26	600	1880	2300	1520	1450	1500	2930	2580	1010	998	622	673
27	597	1800	2500	1520	1410	1620	2760	2490	1000	931	629	661
28	628	1780	2700	1500	1380	1900	2680	2410	1060	948	632	652
29	648	1950	2850	1490	---	2230	2680	2330	1160	951	624	612
30	618	2130	2850	1480	---	2450	2850	2260	1190	928	601	588
31	624	---	2810	1480	---	2610	---	2180	---	1130	587	---
TOTAL	20512	47990	87660	54200	44700	47470	99970	100900	43260	51876	24568	17642
MEAN	662	1600	2828	1748	1596	1531	3332	3255	1442	1673	793	588
MAX	750	2130	3740	2680	2000	2610	3920	4210	2130	3530	1280	802
MIN	597	669	2000	1480	1380	1270	2680	2180	1000	928	587	495
CFSM	.48	1.16	2.06	1.27	1.16	1.11	2.42	2.37	1.05	1.22	.58	.43
IN.	.55	1.30	2.37	1.47	1.21	1.28	2.70	2.73	1.17	1.40	.66	.48

CAL YR 1982 TOTAL 681830 MEAN 1868 MAX 6410 MIN 597 CFSM 1.36 IN 18.43
WTR YR 1983 TOTAL 640748 MEAN 1755 MAX 4210 MIN 495 CFSM 1.28 IN 17.32

BEST COPY AVAILABLE

05517890 COBB DITCH NEAR KOUTS, IN

LOCATION.--Lat 41°20'19", long 87°04'30", in NW¼SE¼ sec. 2, T.33 N., R.6 W., Porter County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on County Road 50 West, 1.6 miles upstream from mouth, and 3 miles northwest of Kouts.

DRAINAGE AREA.--30.3 mi^2.

PERIOD OF RECORD.--July 1968 to current year. Prior to October 1971, published as State ditch near Kouts.

GAGE.--Water-stage recorder. Datum of gage is 652.00 ft National Geodetic Vertical Datum of 1929 (Indiana Department of Highways bench mark). Prior to Oct. 19, 1978, water-stage recorder at site 1.4 miles downstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--15 years, 33.4 ft^3/s, 14.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 777 ft^3/s Mar. 5, 1976, from flood mark at site then in use; maximum gage height at present site, 17.71 ft Mar. 13, 1982 (backwater from ice); minimum daily discharge, 8.9 ft^3/s Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 3	1700	469	14.51	Apr. 2	2000	485	14.68
Dec. 5	2200	188	11.18	Apr. 14	1100	295	12.52
Dec. 25	1500	298	12.56	Apr. 30	1300	449	14.29
Feb. 3	0200	254	12.01	May 2	0800	618	16.20
Mar. 28	0700	155	10.73	July 2	1500	*763	*17.66

Minimum daily discharge, 14.0 ft^3/s Oct. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	34	34	28	25	43	160	29	48	19	17
2	14	40	31	32	79	24	360	499	29	601	18	16
3	14	25	336	30	174	24	266	184	30	497	18	16
4	14	21	286	29	71	23	121	117	29	178	19	16
5	14	20	174	27	49	23	87	85	28	100	18	16
6	15	19	149	27	41	23	73	69	28	73	18	16
7	15	19	95	27	36	24	72	61	27	57	18	16
8	15	18	70	26	33	25	61	55	26	47	17	16
9	15	18	59	26	31	26	66	51	26	41	16	15
10	16	18	52	26	29	25	77	45	26	38	16	15
11	15	27	45	26	28	25	66	42	25	36	17	15
12	15	39	40	25	27	25	54	39	25	33	17	15
13	15	27	37	25	26	25	72	38	24	30	16	15
14	15	24	34	25	26	24	234	43	24	29	15	15
15	15	22	34	24	30	23	107	39	24	29	15	15
16	15	21	34	24	38	22	75	36	24	27	15	16
17	15	20	33	24	41	22	63	34	23	26	38	16
18	15	20	32	23	40	24	55	33	23	28	25	16
19	15	21	31	23	39	54	48	69	23	33	21	20
20	16	50	29	23	37	40	43	61	23	27	20	22
21	15	45	27	23	32	34	40	46	22	25	19	25
22	15	33	27	24	29	33	37	46	22	24	18	19
23	15	34	27	25	28	32	36	43	22	23	18	18
24	15	38	28	25	27	33	34	37	21	23	18	17
25	15	30	181	26	26	32	32	34	21	22	18	17
26	15	27	106	26	25	32	31	32	21	21	18	18
27	15	26	62	25	25	75	30	31	21	21	18	17
28	15	46	79	24	25	144	34	31	43	21	18	17
29	15	67	57	24	---	82	34	33	29	20	17	16
30	15	43	42	32	---	55	311	32	43	20	17	16
31	15	---	36	32	---	45	---	31	---	20	17	---
TOTAL	462	875	2307	812	1120	1123	2662	2156	781	2218	572	504
MEAN	14.9	29.2	74.4	26.2	40.0	36.2	88.7	69.5	26.0	71.5	18.5	16.8
MAX	16	67	336	34	174	144	360	499	43	601	38	25
MIN	14	17	27	23	25	22	30	31	21	20	15	15
CFSM	.47	.92	2.35	.83	1.26	1.14	2.80	2.19	.82	2.26	.58	.53
IN.	.54	1.03	2.71	.95	1.31	1.32	3.12	2.53	.92	2.60	.67	.59

CAL YR 1982 TOTAL 15785 MEAN 43.2 MAX 721 MIN 14 CFSM 1.36 IN 18.52
WTR YR 1983 TOTAL 15592 MEAN 42.7 MAX 601 MIN 14 CFSM 1.35 IN 18.30

05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW¼NE¼ sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, on right bank 25 ft upstream from Monon Railroad bridge, 1 mile south of Shelby, 7.7 miles upstream from Beaver Lake ditch, and at mile 67.9.

DRAINAGE AREA.--1,779 mi^2, of which 201 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft upstream. All at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--61 years, 1,619 ft^3/s, 12.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,650 ft^3/s Mar. 26, 1982; maximum gage height, 12.98 ft Mar. 24, 1982; minimum daily discharge, 260 ft^3/s Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,120 ft^3/s May 8; gage height, 11.44 ft; minimum daily, 639 ft^3/s Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	839	820	2730	3280	1870	1720	2920	3890	2870	1440	1270	728
2	842	1100	2790	3190	1970	1730	3200	4350	2770	1720	1310	728
3	836	1550	3180	3050	2300	1720	3780	4830	2680	2860	1270	700
4	826	1850	3830	2890	2450	1700	4010	4960	2610	3620	1180	660
5	811	2050	4140	2740	2490	1670	4020	5030	2490	3870	1120	657
6	796	2180	4270	2630	2500	1660	4030	5060	2420	3890	1060	642
7	810	2190	4320	2550	2440	1680	4080	5070	2350	3720	1040	660
8	827	2090	4310	2470	2340	1720	4170	5110	2280	3420	1020	671
9	859	1890	4310	2390	2230	1750	4250	5100	2200	3090	952	665
10	885	1730	4320	2330	2150	1800	4280	5070	2110	2770	913	657
11	876	1710	4310	2290	2100	1820	4300	5020	2020	2540	949	645
12	844	1840	4270	2260	2020	1800	4260	4950	1950	2350	945	639
13	834	1940	4170	2210	1940	1750	4200	4880	1890	2140	938	674
14	821	1990	4010	2150	1880	1710	4300	4810	1830	1910	891	680
15	819	2030	3860	2100	1860	1680	4500	4690	1790	1760	880	677
16	821	1990	3730	2040	1850	1650	4520	4500	1750	1640	861	694
17	841	1890	3600	2010	1870	1630	4550	4320	1720	1550	864	703
18	834	1800	3480	1950	1900	1630	4560	4100	1650	1470	974	709
19	818	1740	3390	1900	1930	1700	4580	3980	1570	1500	1040	746
20	810	1810	3290	1840	1960	1810	4600	3990	1510	1580	996	786
21	797	1950	3190	1830	1960	1900	4610	3950	1460	1600	920	851
22	792	2060	3100	1850	1950	1940	4580	3840	1390	1480	864	888
23	778	2190	3000	1880	1920	1950	4500	3780	1340	1370	826	891
24	766	2340	2920	1900	1890	1950	4310	3690	1290	1300	814	874
25	771	2390	2930	1890	1860	1950	4090	3580	1230	1250	792	858
26	772	2400	3130	1900	1810	1930	3880	3470	1190	1210	789	858
27	777	2390	3180	1880	1770	1960	3700	3360	1170	1200	786	842
28	778	2370	3240	1860	1740	2160	3610	3240	1210	1140	786	830
29	794	2510	3320	1830	---	2450	3530	3130	1330	1140	786	817
30	794	2640	3340	1820	---	2650	3590	3030	1400	1110	770	799
31	790	---	3330	1840	---	2800	---	2920	---	1180	755	---
TOTAL	25258	59430	110990	68750	56950	57970	123510	131700	55470	62820	29361	22229
MEAN	815	1981	3580	2218	2034	1870	4117	4248	1849	2026	947	741
MAX	885	2640	4320	3280	2500	2800	4610	5110	2870	3890	1310	891
MIN	766	820	2730	1820	1740	1630	2920	2920	1170	1110	755	639
CFSM	.46	1.11	2.01	1.25	1.14	1.05	2.31	2.39	1.04	1.14	.53	.42
IN.	.53	1.24	2.32	1.44	1.19	1.21	2.58	2.75	1.16	1.31	.61	.46

CAL YR 1982 TOTAL 888385 MEAN 2434 MAX 7650 MIN 666 CFSM 1.37 IN 18.58
WTR YR 1983 TOTAL 804438 MEAN 2204 MAX 5110 MIN 639 CFSM 1.24 IN 16.82

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW$^{1/4}$NW$^{1/4}$ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on Ackerman Avenue, 0.5 mile upstream from Bruce ditch, 1.5 miles downstream from Cedar Creek, 1.6 miles north of Schneider, and at mile 10.1.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1915: 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 108 ft^3/s, 11.92 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft^3/s Mar. 5, 1976; maximum gage height, 12.37 ft June 25, 1975; minimum daily discharge, 3.6 ft^3/s Sept. 7,8,10, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 730 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 3	1600	1880	10.61	Apr. 14	1500	772	6.18
Dec. 25	1700	756	6.10	Apr. 30	1500	1020	7.31
Apr. 2	2300	1490	9.20	May 2	0400	*2150	*11.53

Minimum daily discharge, 23 ft^3/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	27	203	170	82	95	213	752	96	59	92	27
2	25	110	194	150	193	92	973	1830	92	89	49	27
3	25	93	1370	135	501	80	1250	1520	93	163	40	26
4	24	65	1710	120	349	77	791	977	92	118	39	26
5	25	54	1320	114	253	76	521	631	87	94	49	26
6	25	47	1040	108	211	76	409	447	85	77	43	26
7	28	42	728	107	170	81	357	351	83	66	36	26
8	26	39	510	101	145	88	306	280	79	57	34	25
9	28	37	391	100	130	92	335	258	76	52	31	25
10	39	35	331	113	115	89	406	232	75	50	29	24
11	34	55	283	115	106	88	344	209	71	48	32	24
12	31	171	249	107	98	89	275	188	69	44	30	24
13	29	125	225	104	94	98	257	164	66	41	27	23
14	29	92	211	103	94	97	674	171	65	40	27	23
15	28	76	195	100	101	90	554	165	66	39	26	23
16	27	66	163	93	110	84	380	154	64	38	24	26
17	27	61	155	86	114	80	312	141	62	38	43	25
18	27	59	157	79	113	89	260	133	59	37	47	24
19	26	59	152	71	120	189	209	164	58	37	36	27
20	26	154	143	77	128	189	189	194	57	49	34	31
21	32	193	135	82	124	170	173	160	56	42	32	41
22	30	153	129	88	119	161	161	161	53	38	29	37
23	29	142	125	90	114	153	150	153	48	37	29	35
24	28	180	126	82	114	151	141	139	47	36	28	32
25	28	143	517	79	110	146	131	129	45	35	28	31
26	27	124	533	76	103	147	120	121	44	34	34	34
27	26	117	358	74	99	241	115	114	45	34	33	32
28	26	188	406	72	97	524	124	110	55	32	31	30
29	26	343	332	72	---	391	129	108	51	31	29	29
30	25	246	249	85	---	284	728	107	60	32	28	28
31	26	---	215	89	---	236	---	103	---	68	28	---
TOTAL	858	3296	12855	3042	4107	4543	10987	10366	1999	1655	1097	837
MEAN	27.7	110	415	98.1	147	147	366	334	66.6	53.4	35.4	27.9
MAX	39	343	1710	170	501	524	1250	1830	96	163	92	41
MIN	24	27	125	71	82	76	115	103	44	31	24	23
CFSM	.23	.89	3.37	.80	1.20	1.20	2.98	2.72	.54	.43	.29	.23
IN.	.26	1.00	3.89	.92	1.24	1.37	3.32	3.14	.60	.50	.33	.25

CAL YR 1982 TOTAL 62657 MEAN 172 MAX 1770 MIN 18 CFSM 1.40 IN 18.95
WTR YR 1983 TOTAL 55642 MEAN 152 MAX 1830 MIN 23 CFSM 1.24 IN 16.83

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW¼SW¼ sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft downstream from bridge on county road, 0.5 mile north of Rosebud, 0.5 mile downstream from confluence of Swain and Dexter ditches, 1.5 miles upstream from Davidson ditch, 2 miles east of Parr, and at mile 93.5.

DRAINAGE AREA.--35.6 mi^2.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-53. WSP 1728: 1959-60(M). WSP 1915: 1949-60. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 661.47 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 27.0 ft^3/s, 10.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 475 ft^3/s May 2, 1983; maximum gage height, 8.86 ft Feb. 10, 1959; minimum daily discharge, 0.5 ft^3/s Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 3	2000	223	3.78	May 2	0500	*475	*5.55
Apr. 2	1700	317	4.53	May 19	1300	174	3.34
Apr. 14	0800	267	4.14				

Minimum daily discharge, 2.7 ft^3/s Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	11	33	38	20	24	54	122	32	32	5.8	3.1
2	4.7	42	30	35	64	23	264	367	31	24	5.4	3.0
3	4.7	22	163	32	110	22	217	201	33	19	5.0	2.9
4	4.7	15	186	30	65	23	134	144	33	16	5.6	2.9
5	4.8	12	145	29	47	22	104	103	31	14	5.4	2.9
6	5.0	11	118	28	41	23	93	85	30	13	5.4	2.9
7	5.6	11	86	29	36	25	103	74	28	12	5.2	3.0
8	5.2	10	68	26	32	29	83	63	27	12	5.2	2.9
9	5.5	10	57	26	30	27	89	54	26	11	4.9	2.9
10	5.8	10	52	27	27	26	100	50	25	11	4.9	2.8
11	5.2	12	47	28	25	26	83	47	23	10	5.8	2.7
12	5.2	16	42	25	24	26	69	45	22	9.6	5.2	2.8
13	4.9	14	39	25	23	26	110	47	21	9.1	5.0	2.8
14	5.2	12	36	24	25	25	222	81	20	9.1	5.0	2.8
15	4.8	11	39	22	28	23	130	68	20	8.9	4.9	3.1
16	4.9	11	40	20	33	22	91	55	19	8.5	4.9	3.1
17	4.8	10	38	18	33	22	82	48	18	8.3	9.6	3.1
18	4.7	9.8	37	17	33	32	69	45	17	7.7	6.3	3.4
19	4.7	9.8	35	17	34	61	59	115	17	7.7	4.9	4.0
20	5.4	18	31	17	32	50	53	93	17	8.1	4.7	3.6
21	4.9	21	29	18	30	47	49	69	15	7.5	4.4	3.9
22	4.9	18	29	20	30	45	46	65	14	7.2	4.4	4.1
23	4.7	23	29	21	29	41	44	61	14	6.8	4.3	3.7
24	4.5	25	40	21	28	41	40	51	13	6.8	4.0	3.5
25	4.6	21	94	20	25	38	38	46	13	6.7	4.0	3.7
26	4.5	20	78	20	24	40	36	41	12	6.7	4.1	3.6
27	4.5	22	61	19	24	78	35	39	12	6.5	4.0	3.7
28	4.5	42	83	19	24	98	42	41	18	6.3	3.7	3.6
29	4.6	52	62	19	---	70	44	40	36	6.0	3.7	3.5
30	4.7	39	47	22	---	57	110	38	47	6.0	3.2	3.5
31	5.7	---	41	21	---	51	---	35	---	6.2	3.2	---
TOTAL	152.5	560.6	1915	733	976	1163	2693	2433	684	323.7	152.1	97.5
MEAN	4.92	18.7	61.8	23.6	34.9	37.5	89.8	78.5	22.8	10.4	4.91	3.25
MAX	5.8	52	186	38	110	98	264	367	47	32	9.6	4.1
MIN	4.5	9.8	29	17	20	22	35	35	12	6.0	3.2	2.7
CFSM	.14	.53	1.74	.66	.98	1.05	2.52	2.21	.64	.29	.14	.09
IN.	.16	.59	2.00	.77	1.02	1.22	2.81	2.54	.71	.34	.16	.10

CAL YR 1982 TOTAL 14305.1 MEAN 39.2 MAX 430 MIN 3.5 CFSM 1.10 IN 14.95
WTR YR 1983 TOTAL 11883.4 MEAN 32.6 MAX 367 MIN 2.7 CFSM .92 IN 12.42

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles upstream from Ryan ditch, 2 miles east of North Marion, 3.5 miles northeast of Rensselaer, and at mile 87.7.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.68 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for no gage-height record, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--34 years (water years 1950 to current year), 133 ft³/s, 12.54 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s June 10, 1958, gage height, 15.09 ft; minimum daily, 1.6 ft³/s Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,290 ft³/s May 3, gage height, 11.33 ft; minimum daily, 3.6 ft³/s Sept. 13.

NOTE.--No gage-height record July 26 to Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	32	189	182	100	115	235	536	136	154	20	10
2	18	184	164	168	255	110	587	998	130	130	16	9.0
3	18	174	384	154	552	108	1050	1270	134	92	14	8.7
4	17	101	768	141	433	107	1060	1230	136	70	18	8.0
5	17	76	750	136	274	107	866	1010	122	56	19	6.6
6	17	63	580	132	212	103	662	734	115	40	16	6.7
7	18	53	450	134	182	111	578	515	110	42	13	7.7
8	17	47	350	125	163	162	555	376	101	38	14	9.5
9	19	50	280	122	150	165	460	293	95	34	12	9.5
10	18	44	240	128	142	147	450	243	90	33	11	9.5
11	20	52	220	131	136	140	446	219	89	33	17	9.4
12	18	75	202	122	129	135	375	199	85	31	21	7.0
13	18	77	182	118	124	130	356	203	81	31	17	3.6
14	17	65	174	118	126	127	644	323	77	33	14	3.8
15	17	57	175	109	138	121	843	424	79	33	13	4.2
16	17	57	192	100	158	115	699	334	75	34	12	6.7
17	17	50	189	91	159	105	523	261	71	35	20	9.1
18	17	49	180	86	162	123	406	219	67	28	29	9.5
19	17	48	170	83	167	239	325	270	63	28	24	12
20	18	67	157	86	159	266	273	435	63	30	18	19
21	18	93	145	89	157	241	242	359	61	29	16	17
22	17	99	138	98	152	234	220	293	53	26	15	16
23	17	107	138	102	146	214	204	287	49	25	12	13
24	17	133	167	104	136	205	187	253	46	25	10	12
25	17	116	342	100	127	191	171	211	44	23	9.2	12
26	17	103	464	99	120	186	161	184	46	21	9.6	12
27	17	105	374	96	115	267	156	169	46	20	15	12
28	17	154	380	95	115	427	171	166	62	24	14	12
29	17	259	366	94	---	433	188	166	112	23	13	12
30	17	244	267	110	---	327	324	153	142	21	12	12
31	17	---	208	107	---	262	---	143	---	21	12	---
TOTAL	541	2834	8985	3560	4989	5723	13417	12476	2580	1263	475.8	299.5
MEAN	17.5	94.5	290	115	178	185	447	402	86.0	40.7	15.3	9.98
MAX	20	259	768	182	552	433	1060	1270	142	154	29	19
MIN	17	32	138	83	100	103	156	143	44	20	9.2	3.6
CFSM	.12	.66	2.01	.80	1.24	1.29	3.10	2.79	.60	.28	.11	.07
IN.	.14	.73	2.32	.92	1.29	1.48	3.47	3.22	.67	.33	.12	.08

CAL YR 1982 TOTAL 74486.0 MEAN 204 MAX 1690 MIN 12 CFSM 1.42 IN 19.24
WTR YR 1983 TOTAL 57143.3 MEAN 157 MAX 1270 MIN 3.6 CFSM 1.09 IN 14.76

05522500 IROQUOIS RIVER AT RENSSELAER, IN

LOCATION.--Lat 40°56'00", long 87°07'44", in NW¼SE¼ sec.29, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on right bank 20 ft downstream from bridge on State Highway 114, 0.8 mile east of Rensselaer, 1.5 miles downstream from Ryan ditch, 5.5 miles upstream from Slough Creek, and at mile 84.9.

DRAINAGE AREA.--203 mi².

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.29 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. Streamflow affected by irrigation.

AVERAGE DISCHARGE.--35 years, 168 ft³/s, 11.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s June 10, 1958, gage height, 16.54 ft; minimum daily, 2.2 ft³/s Sept. 9, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft³/s May 3, gage height, 12.86 ft; minimum daily, 14 ft³/s Sept. 13-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	49	272	244	132	131	308	718	165	223	29	17
2	17	299	235	224	293	126	853	1300	158	183	23	17
3	16	274	584	205	622	122	1260	1500	166	126	22	16
4	16	156	970	183	511	120	1230	1420	167	98	26	15
5	18	108	947	178	343	119	1020	1160	148	81	27	15
6	18	86	743	171	271	116	803	868	141	61	23	16
7	22	72	550	172	231	127	732	633	135	60	21	17
8	22	65	420	159	194	205	690	471	123	54	22	17
9	23	66	348	153	180	207	586	371	117	50	20	16
10	20	61	298	159	168	179	589	315	109	48	19	16
11	23	67	259	164	156	171	576	283	107	47	25	15
12	23	99	237	153	148	162	484	259	103	45	29	15
13	19	105	228	143	140	155	476	270	98	44	25	14
14	18	87	245	148	148	150	872	466	93	45	21	14
15	18	73	266	137	163	140	1020	605	95	45	21	14
16	17	76	254	122	197	132	846	461	91	45	20	16
17	17	67	242	113	198	120	655	359	84	46	26	17
18	18	64	228	110	202	150	514	301	79	36	39	16
19	19	65	205	112	209	327	414	358	75	37	27	18
20	21	95	189	118	199	344	348	517	75	39	24	24
21	22	138	181	121	194	312	307	434	72	39	22	22
22	19	137	181	129	189	303	279	363	62	35	22	21
23	19	155	181	140	178	275	259	356	59	35	20	19
24	18	196	214	135	165	262	238	312	56	34	17	18
25	18	164	473	134	150	239	218	264	53	29	15	17
26	18	143	612	128	139	235	203	229	54	28	16	16
27	18	145	500	125	132	391	197	210	54	26	20	17
28	17	236	508	121	131	586	219	207	78	30	21	16
29	18	385	485	124	---	554	241	206	149	30	19	16
30	18	348	356	136	---	423	479	188	205	28	18	15
31	19	---	281	137	---	337	---	174	---	28	18	---
TOTAL	588	4081	11692	4598	5983	7220	16916	15578	3171	1755	697	502
MEAN	19.0	136	377	148	214	233	564	503	106	56.6	22.5	16.7
MAX	23	385	970	244	622	586	1260	1500	205	223	39	24
MIN	16	49	181	110	131	116	197	174	53	26	15	14
CFSM	.09	.67	1.86	.73	1.05	1.15	2.78	2.48	.52	.28	.11	.08
IN.	.11	.75	2.14	.84	1.10	1.32	3.10	2.85	.58	.32	.13	.09

CAL YR 1982 TOTAL 88791 MEAN 243 MAX 2000 MIN 14 CFSM 1.20 IN 16.27
WTR YR 1983 TOTAL 72781 MEAN 199 MAX 1500 MIN 14 CFSM .98 IN 13.34

05523000 RICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE1/4NW1/4 sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles upstream from mouth, 3 miles southeast of South Marion, and 5 miles southeast of Rensselaer.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 651.30 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1955, nonrecording gage, and Aug. 5, 1955, to Sept. 30, 1965, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--34 years (water years 1950 to current year), 17.2 ft³/s, 10.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s Mar. 4, 1979; maximum gage height, 14.02 ft June 13, 1958, at present datum; no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 340 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
May 2	0500	*885	*10.40

Minimum daily discharge, 0.18 ft³/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	12	23	20	8.7	10	43	103	7.9	28	.68	.39
2	.22	130	50	18	78	9.4	269	617	7.5	14	.62	.39
3	.25	88	115	15	87	8.8	176	186	9.8	8.7	.57	.39
4	.20	30	125	13	46	8.7	90	106	18	6.8	.68	.33
5	.20	12	113	12	28	8.5	72	72	13	5.5	.68	.27
6	.21	5.9	88	12	21	8.8	65	54	11	4.6	.68	.30
7	.34	4.4	65	11	16	10	78	42	9.4	4.1	.62	.25
8	.28	3.4	50	10	14	19	59	38	8.2	3.8	.57	.26
9	.29	2.8	39	11	13	14	58	25	7.5	3.5	.52	.25
10	.35	2.6	32	13	12	12	70	20	7.0	3.3	.48	.24
11	.32	3.0	26	15	11	12	58	17	6.5	3.1	.68	.21
12	.29	12	21	11	9.5	11	43	15	6.2	2.7	.68	.23
13	.27	9.3	17	10	9.3	11	54	17	6.0	2.4	.57	.21
14	.28	5.9	18	10	11	11	146	42	5.7	2.2	.52	.18
15	.31	3.7	39	9.0	17	8.8	79	47	6.0	2.0	.52	.24
16	.33	3.2	44	8.3	25	8.3	56	27	5.6	1.8	.48	.32
17	.31	2.8	38	7.0	24	8.2	52	20	5.1	1.6	.80	.28
18	.33	2.4	32	6.5	25	18	38	17	5.0	1.4	.93	.26
19	.33	2.4	26	6.3	26	65	28	18	4.9	1.3	.80	.24
20	.46	9.1	22	6.1	24	45	23	15	4.7	1.1	.62	.39
21	.46	21	17	6.2	22	43	20	13	4.4	1.0	.48	.43
22	.41	19	17	7.0	20	41	17	15	4.1	.86	.52	.48
23	.40	30	17	7.9	17	34	16	13	3.9	.93	.52	.39
24	.40	37	35	8.2	15	31	14	11	3.7	1.1	.52	.34
25	.44	16	105	8.3	12	25	13	11	3.6	.93	.43	.30
26	.42	12	81	7.8	10	27	12	9.5	3.4	.86	.52	.29
27	.43	12	63	7.1	10	103	11	8.8	3.4	.80	.62	.28
28	.36	43	88	6.6	11	104	16	12	4.6	.74	.62	.27
29	.29	48	54	7.8	---	70	17	14	4.6	.68	.57	.26
30	.28	33	33	9.7	---	54	88	11	31	.68	.48	.25
31	.36	---	29	9.0	---	43	---	9.1	---	.68	.39	---
TOTAL	10.03	615.9	1522	309.8	622.5	882.5	1781	1625.4	221.7	111.16	18.37	8.92
MEAN	.32	20.5	49.1	9.99	22.2	28.5	59.4	52.4	7.39	3.59	.59	.30
MAX	.46	130	125	20	87	104	269	617	31	28	.93	.48
MIN	.20	2.4	17	6.1	8.7	8.2	11	8.8	3.4	.68	.39	.18
CFSM	.02	.94	2.25	.46	1.02	1.31	2.73	2.40	.34	.17	.03	.01
IN.	.02	1.05	2.60	.53	1.06	1.51	3.04	2.77	.38	.19	.03	.02

CAL YR 1982 TOTAL 10722.57 MEAN 29.4 MAX 469 MIN .17 CFSM 1.35 IN 18.30
WTR YR 1983 TOTAL 7729.28 MEAN 21.2 MAX 617 MIN .18 CFSM .97 IN 13.19

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE$^{1/4}$SE$^{1/4}$ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 55, 0.2 mile north of intersection of State Highways 16 and 55, 0.5 mile downstream from Mosquito Creek, 0.6 mile west of Foresman, 3 miles east of Brook, and at mile 72.7.

DRAINAGE AREA.--449 mi^2.

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115 : Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.00 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles upstream at datum 3.54 ft higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--34 years (water years 1950 to current year), 383 ft^3/s, 11.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft^3/s June 14, 1958, gage height, 24.42 ft; minimum daily, 6.3 ft^3/s Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,300 ft^3/s May 4, gage height, 18.82 ft; minimum daily, 16 ft^3/s Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	58	959	792	268	292	1040	1210	367	637	35	25
2	23	705	829	622	502	282	1310	2190	341	541	34	23
3	20	949	1130	523	1160	268	1960	3040	350	355	29	22
4	18	790	1680	454	1260	258	2280	3280	440	239	33	21
5	18	467	2030	420	1130	253	2240	2960	428	187	34	20
6	20	255	2220	398	903	250	2050	2510	373	141	32	20
7	28	169	2180	398	669	262	1860	2090	341	123	27	21
8	31	131	1950	367	491	347	1710	1710	303	112	26	20
9	29	113	1690	349	446	409	1590	1440	279	103	25	19
10	31	103	1470	360	402	370	1530	1190	260	96	22	18
11	26	103	1250	377	378	343	1490	935	247	95	28	17
12	28	163	1000	356	342	327	1390	719	235	84	32	18
13	27	234	767	324	312	319	1310	605	223	76	30	17
14	24	206	600	325	320	312	1510	742	211	74	25	16
15	22	166	545	313	360	293	1740	1070	209	74	22	18
16	22	139	629	269	440	269	1780	1160	206	72	21	21
17	21	125	666	242	484	252	1670	1070	191	73	28	23
18	21	111	640	224	488	287	1530	896	181	67	45	24
19	22	107	594	235	513	661	1350	849	175	58	42	24
20	27	139	523	249	509	838	1150	993	186	58	30	30
21	28	251	446	260	488	816	943	997	166	60	25	31
22	28	348	401	279	469	780	764	908	148	55	24	27
23	25	383	391	302	446	727	637	834	138	50	26	26
24	24	533	434	302	409	671	555	742	130	50	22	22
25	23	489	859	279	365	612	488	634	118	46	20	20
26	24	386	1230	267	324	570	446	538	113	43	23	19
27	25	356	1290	256	301	823	417	469	114	41	27	18
28	24	496	1300	250	296	1240	433	455	129	38	33	19
29	24	974	1310	249	---	1380	485	473	258	41	30	17
30	25	1020	1200	270	---	1340	767	443	428	39	27	17
31	29	---	1000	279	---	1200	---	405	---	38	24	---
TOTAL	761	10469	33213	10590	14475	17051	38425	37557	7288	3766	881	633
MEAN	24.5	349	1071	342	517	550	1281	1212	243	121	28.4	21.1
MAX	31	1020	2220	792	1260	1380	2280	3280	440	637	45	31
MIN	18	58	391	224	268	250	417	405	113	38	20	16
CFSM	.06	.78	2.39	.76	1.15	1.23	2.85	2.70	.54	.27	.06	.05
IN.	.06	.87	2.75	.88	1.20	1.41	3.18	3.11	.60	.31	.07	.05

CAL YR 1982 TOTAL 227753 MEAN 624 MAX 4500 MIN 18 CFSM 1.39 IN 18.87
WTR YR 1983 TOTAL 175109 MEAN 480 MAX 3280 MIN 16 CFSM 1.07 IN 14.51

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE¼NW¼ sec.20, T.36 N., R.9 W., Lake County, Hydrologic Unit 07120003, on left bank at city limits of Munster, 0.2 mile downstream from Ridge Road, and 0.4 mile upstream from mouth.

DRAINAGE AREA.--70.7 mi².

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 591.27 ft National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Since Sept. 11, 1959, auxiliary water-stage recorder 1,200 ft upstream from base gage, at same datum.

REMARKS.--Records good. High flow occasionally in backwater from Little Calumet River.

AVERAGE DISCHARGE.--41 years, 61.4 ft³/s, 11.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s Apr. 28, 1959; maximum gage height, 9.04 ft June 14, 1981; minimum daily discharge, 1.6 ft³/s Dec. 24-26, 31, 1963, Jan. 1, 2, Sept. 4-9, 14-17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 4	0300	*2110	*8.20	May 2	1800	1070	5.58
Apr. 3	0900	1000	5.21	July 1	0400	1600	7.12
May 1	2100	1080	5.50				

Minimum daily discharge, 8.6 ft³/s Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	81	129	57	46	41	118	270	38	75	52	9.7
2	10	161	224	51	339	40	650	969	34	976	28	9.7
3	9.2	60	1670	41	465	39	926	597	40	455	20	9.3
4	10	33	1840	37	234	37	532	290	36	243	19	9.2
5	11	23	948	35	142	37	268	128	32	104	18	9.0
6	28	19	678	35	107	44	162	115	33	97	18	19
7	17	16	367	35	81	57	121	100	26	62	17	10
8	9.5	14	257	33	78	63	115	172	25	47	15	8.7
9	21	15	191	32	62	54	285	107	25	39	13	9.6
10	40	14	135	40	58	47	371	78	24	51	13	11
11	16	83	105	45	52	44	165	64	21	36	18	21
12	11	141	88	40	47	40	142	56	19	29	13	10
13	10	84	74	34	44	38	150	58	17	25	12	17
14	8.6	47	62	35	54	38	693	126	20	22	11	10
15	9.5	34	60	31	81	36	510	132	28	20	10	15
16	9.5	29	62	28	90	34	236	83	18	20	10	15
17	9.5	25	57	27	90	33	158	60	17	110	125	13
18	10	23	53	25	83	104	118	51	15	60	33	26
19	14	46	53	24	88	285	92	105	15	137	21	111
20	33	96	51	22	95	137	76	100	14	124	17	58
21	12	141	44	23	90	115	68	64	12	41	15	31
22	11	101	40	34	81	100	62	178	12	31	14	24
23	9.5	118	41	40	72	88	56	150	11	30	12	18
24	10	122	54	43	64	89	51	83	11	26	13	16
25	9.5	74	384	45	54	86	47	62	11	21	11	18
26	9.5	55	294	42	47	82	44	49	12	19	23	17
27	9.5	50	171	37	44	233	41	42	29	18	18	16
28	9.5	234	214	34	42	531	60	42	35	17	15	14
29	10	297	154	36	---	286	56	45	24	21	12	12
30	10	190	88	63	---	168	126	41	33	33	12	12
31	11	---	66	55	---	122	---	40	---	86	11	---
TOTAL	408.3	2426	8654	1159	2830	3148	6499	4457	687	3075	639	579.2
MEAN	13.2	80.9	279	37.4	101	102	217	144	22.9	99.2	20.6	19.3
MAX	40	297	1840	63	465	531	926	969	40	976	125	111
MIN	8.6	14	40	22	42	33	41	40	11	17	10	8.7
CFSM	.19	1.14	3.95	.53	1.43	1.44	3.07	2.04	.32	1.40	.29	.27
IN.	.21	1.28	4.55	.61	1.49	1.66	3.42	2.35	.36	1.62	.34	.30

CAL YR 1982 TOTAL 33475.7 MEAN 91.7 MAX 1840 MIN 7.0 CFSM 1.30 IN 17.61
WTR YR 1983 TOTAL 34561.5 MEAN 94.7 MAX 1840 MIN 8.6 CFSM 1.34 IN 18.18

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'07", long 87°31'18", in SE¼NW¼ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft upstream from Hohman Street bridge at north city limits of Munster, 0.4 mile upstream from Indiana-Illinois State line, and 4.6 miles upstream from Thorn Creek.

DRAINAGE AREA.--90.0 mi². During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River basin; or, during times of floods on Hart ditch, flow may leave the basin and enter eastern portion of the Little Calumet River basin.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--25 years, 75.0 ft³/s, 11.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s Apr. 28, 1959, gage height, 13.67 ft; maximum gage height, 16.40 ft June 14, 1981; minimum daily discharge, 1.9 ft³/s Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1110 ft³/s Dec. 4, gage height, 16.03 ft; minimum daily, 8.1 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	52	179	105	68	58	168	233	56	66	62	13
2	8.8	203	193	91	244	54	509	649	51	896	41	12
3	8.1	96	930	79	437	51	704	440	56	807	30	11
4	8.8	60	1090	69	297	49	523	350	53	530	26	11
5	9.2	42	740	65	224	49	373	301	47	362	23	12
6	13	33	650	61	181	51	314	243	51	283	23	25
7	30	29	570	60	145	68	270	212	45	219	21	15
8	13	25	480	57	117	72	227	205	40	170	18	12
9	18	24	410	54	109	64	295	164	37	136	18	12
10	10	23	345	59	97	60	345	134	35	120	16	12
11	20	70	311	64	86	56	270	114	33	101	20	25
12	15	136	252	62	74	54	222	98	31	82	16	14
13	12	120	210	55	69	50	230	90	29	68	14	22
14	10	87	178	56	71	49	474	134	28	56	13	17
15	9.9	64	165	51	89	46	485	133	42	49	13	15
16	9.4	50	153	45	101	44	318	114	30	43	13	24
17	8.9	40	136	42	105	42	250	95	27	107	134	16
18	8.4	36	123	41	103	81	199	85	26	170	64	19
19	9.9	43	114	38	104	190	165	110	25	199	42	127
20	41	95	103	36	107	160	143	112	24	214	34	71
21	19	117	91	36	106	140	124	95	22	106	28	60
22	17	116	81	45	100	129	110	143	22	80	24	42
23	14	128	79	55	93	124	97	148	21	70	20	35
24	12	131	89	58	85	124	84	119	22	60	18	28
25	11	110	377	62	78	118	76	97	19	50	16	25
26	10	88	351	62	70	117	69	81	18	43	21	25
27	9.9	77	226	58	64	178	63	71	30	42	21	22
28	9.6	187	225	54	60	362	80	66	51	43	17	20
29	9.6	260	197	52	---	298	74	67	37	36	15	18
30	9.6	218	150	71	---	224	151	59	47	50	14	17
31	11	---	122	74	---	179	---	61	---	68	13	---
TOTAL	405.5	2760	9320	1817	3484	3341	7412	5023	1055	5326	848	777
MEAN	13.1	92.0	301	58.6	124	108	247	162	35.2	172	27.4	25.9
MAX	41	260	1090	105	437	362	704	649	56	896	134	127
MIN	8.1	23	79	36	60	42	63	59	18	36	13	11
CFSM	.15	1.02	3.34	.65	1.38	1.20	2.74	1.80	.39	1.91	.30	.29
IN.	.17	1.14	3.85	.75	1.44	1.38	3.06	2.08	.44	2.20	.35	.32

CAL YR 1982 TOTAL 38956.4 MEAN 107 MAX 1090 MIN 8.1 CFSM 1.19 IN 16.10
WTR YR 1983 TOTAL 41568.5 MEAN 114 MAX 1090 MIN 8.1 CFSM 1.27 IN 17.18

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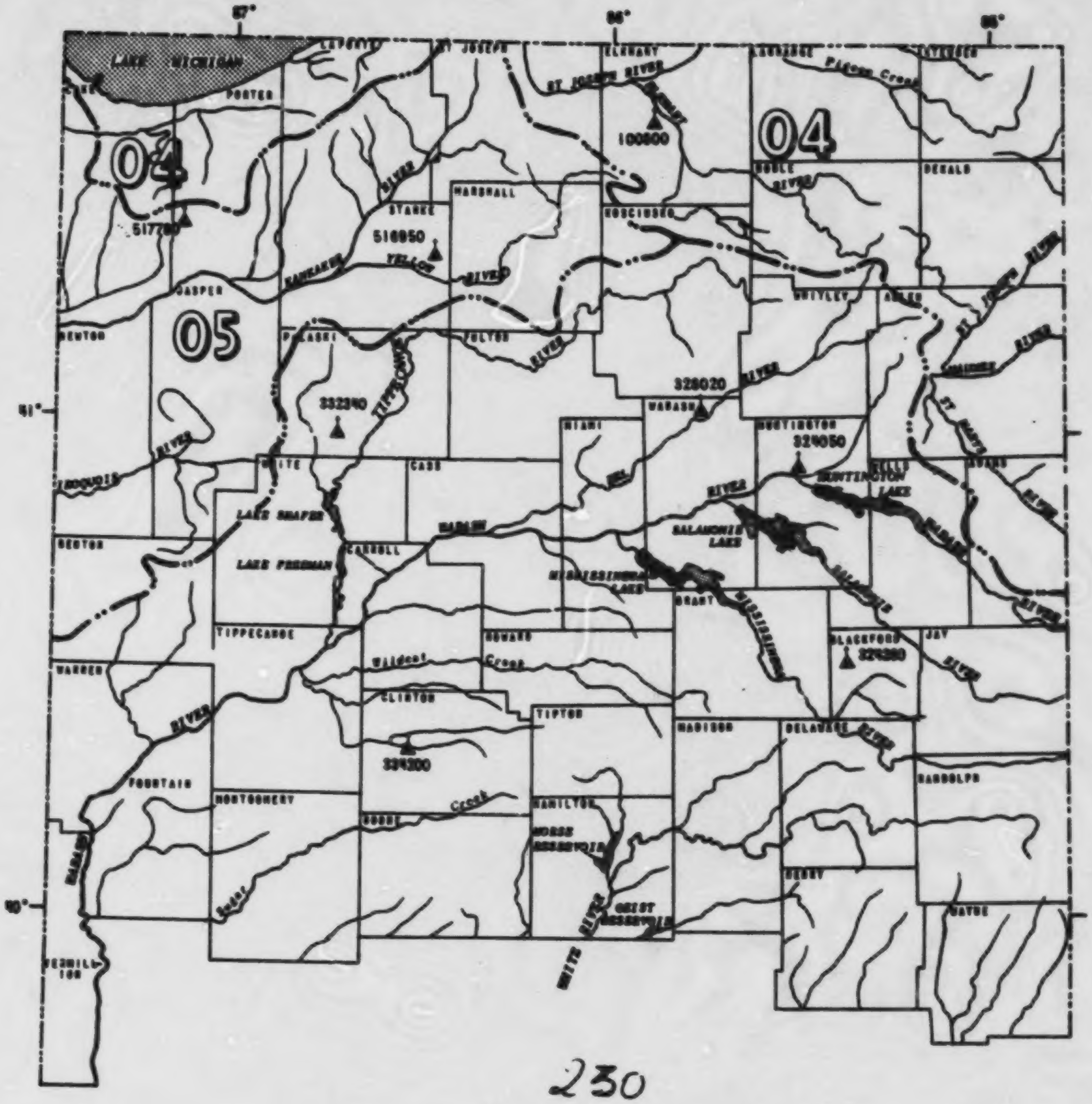
87°
86°
85°
41°
40°
LAKE MICHIGAN
LAKE
PORTER
LAPORTE
ST JOSEPH
ELKHART
LAGRANGE
STEUBEN
ST JOSEPH RIVER
Pigeon Creek
04
04
05
517700
516950
100800
328020
332340
324050
324200
324260
STARKE
MARSHALL
KOSCIUSKO
NOBLE
DEKALB
KANKAKEE
RIVER
YELLOW
RIVER
JASPER
NEWTON
PULASKI
FULTON
RIVER
TIPPECANOE
WHITLEY
ALLEN
ST JOSEPH RIVER
MAUMEE
RIVER
ST MARYS
IROQUOIS
RIVER
WHITE
CASS
MIAMI
WABASH
HUNTINGTON
WELLS
ADAMS
HUNTINGTON LAKE
RIVER
EEL
SALAMONIE LAKE
MISSISSINEWA LAKE
WABASH
LAKE SHAFER
LAKE FREEMAN
BENTON
CARROLL
GRANT
SALAMONIE
MISSISSINEWA
RIVER
TIPPECANOE
WARREN
Wildcat
Creek
HOWARD
CLINTON
TIPTON
BLACKFORD
JAY
RIVER
MADISON
DELAWARE
RIVER
RANDOLPH
RIVER
FOUNTAIN
MONTGOMERY
Creek
BOONE
HAMILTON
MORSE RESERVOIR
GEIST RESERVOIR
WABASH
Sugar
WHITE RIVER
VERMILLION
HENRY
WAYNE

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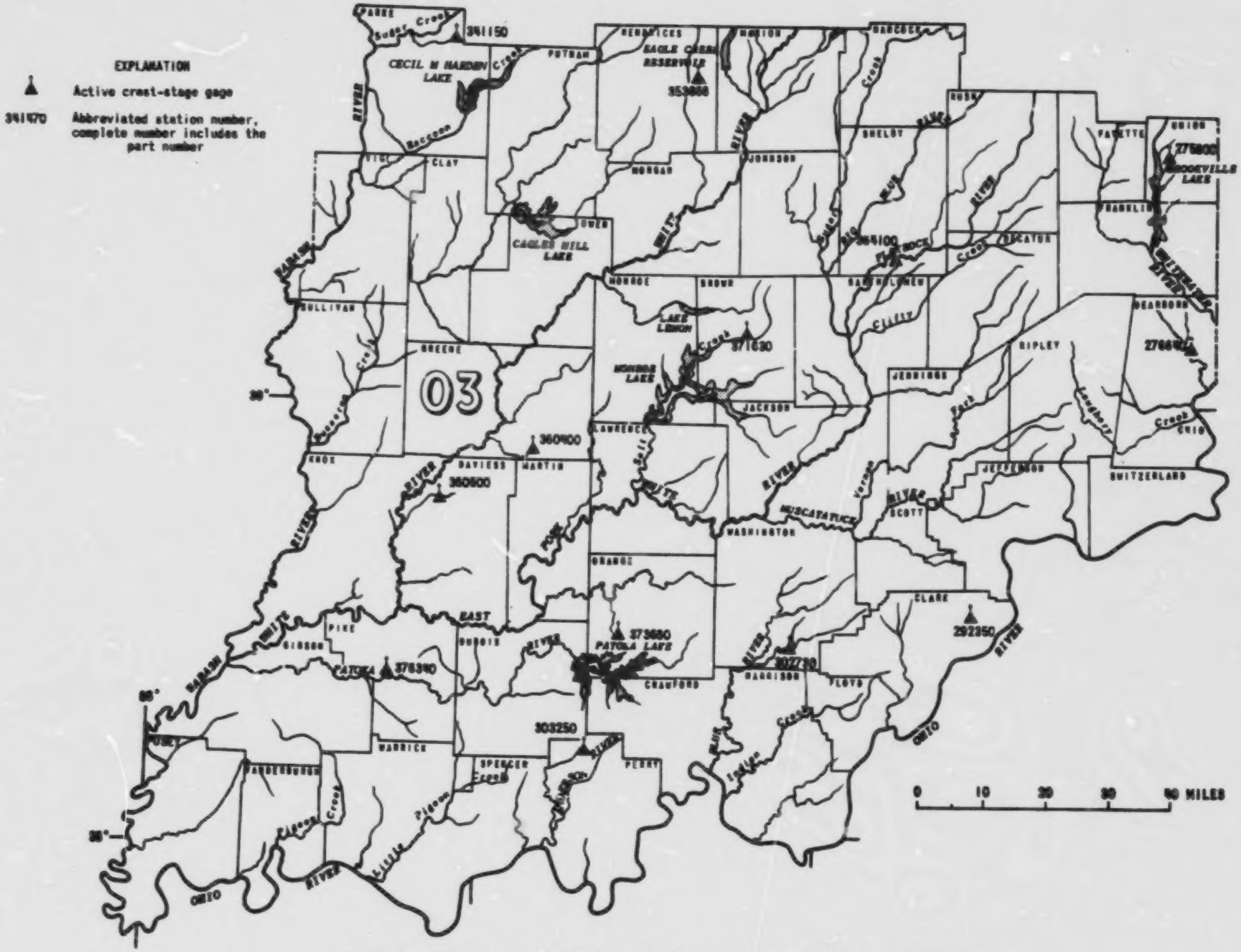
EXPLANATION
Active crest-stage gage
341470 Abbreviated station number, complete number includes the part number
03
341150
353860
275800
364100
371630
276840
360400
360500
373680
376340
302730
292350
303250
CECIL M HARDEN LAKE
EAGLE CREEK RESERVOIR
BROOKVILLE LAKE
CAGLES MILL LAKE
LAKE LEMON
MONROE LAKE
PATOKA LAKE
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
RUSH
FAYETTE
UNION
SHELBY
JOHNSON
MORGAN
VIGO
CLAY
OWEN
FRANKLIN
DECATUR
MONROE
BROWN
BARTHOLOMEW
DEARBORN
RIPLEY
SULLIVAN
GREENE
JENNINGS
LAWRENCE
JACKSON
KNOX
DAVIESS
MARTIN
JEFFERSON
SWITZERLAND
SCOTT
WASHINGTON
ORANGE
CLARK
PIKE
GIBSON
DUBOIS
CRAWFORD
HARRISON
FLOYD
WARRICK
VANDERBURGH
SPENCER
PERRY
POSEY
WABASH
WHITE
RIVER
OHIO
MUSCATATUCK
PATOKA
EAST
0 10 20 30 40 MILES
39°
38°

Figure 5.-- Location of crest-stage partial-record stations in Indiana.

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As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Annual Maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		OHIO RIVER BASIN					
		Great Miami River basin					
03275800	West Run near Liberty, IN	Lat 39°38'24", long 84°57'18", in SE¼SE¼SW¼ sec.2, T.14 N., R.2 W., Union County, at culvert on State Highway 44, 4.8 miles east of Fayette-Union County Line, 1.1 miles west of Liberty.	.26	1973-	05-02-83	5.99	50
		Tanners Creek basin					
03276640	Tanners Creek tributary near Lawrenceburg, IN	Lat 39°09'18", long 84°52'20", in NW¼SW¼NE¼ sec.27, T.6 N., R.1 W., Dearborn County, at culvert on State Highway 1, 0.25 mile east of Salt Fork Road.	.19	1973-	05-03-83	11.00	50
		Fourteenmile Creek basin					
03292350	Flag Run tributary near New Washington, IN	Lat 38°31'08", long 85°32'29", in NW¼NW¼NE¼ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.16	1973-	05-27-82 05-03-83	6.29 6.12	21 18
03302730	South Fork Blue River near Palmyra, IN	Lat 38°28'07", long 86°04'55", in NE¼NW¼ sec.4, T. 15 N., R.4 E., Washington County, at bridge on Old Palmyra Road, 0.2 mile north of State Highway 135 and 4.7 miles north of the intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-	05-18-81 01-23-82 05-01-83	12.74 18.20 22.4[a]	1,070 2,100 9,000
03303250	Sigler Creek tributary at Uniontown, IN	Lat 38°13'21", long 86°41'50", in NW¼SW¼SW¼ sec.25, T.3 S., R.3 W., Perry County, at culvert on State Highway 145, 0.1 mile south of State Highway 62 and U.S. Highway 460.	.15	1973-	04-30-83	9.05	130
		Wabash River basin					
03324050	Clear Creek near Huntington, IN	Lat 40°54'57", long 85°32'42", in SE¼NE¼NW¼ sec.5, T.28 N., R.9 E., Huntington County, at bridge on State Highway 16, 0.8 mile west of State Highway 5, and 3.4 miles northwest of Huntington.	49[a]	1974-80 1983-	05-02-83	12.25	1700
03324260	Salamonie River tributary near Montpelier, IN	Lat 40°33'06", long 85°19'25", in NW¼NW¼NE¼ sec.7, T.24 N., R.11 E., Blackford County, at culvert on State Highway 18, 2.5 miles east of State Highway 3.	.86	1973-	----	b	----
03328020	Otter Creek tributary near North Manchester, IN	Lat 40°59'59", long 85°49'37", in SW¼SE¼SW¼ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	.92	1973-	05-01-83	6.15	110
03332340	Weltzin ditch tributary near Francesville, IN	Lat 40°48'00", long 86°46'33", in SW¼NW¼NW¼ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	.50	1973-	06-13-81 05-02-83	5.87 5.34	13 10

Crest-stage partial-record stations--Continued

					Annual Maximum		
Station number	Station name	Location	Drainage area (mi²)	Period of record	Date	Gage height (ft)	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued					
		Wabash River basin--Continued					
03334200	Prairie Creek tributary near Frankfort, IN	Lat 40°15'14", long 86°30'36", in NW¼SE¼NE¼ sec.22, T.21 N., R.1W., Clinton County, at culvert on State Highways 38 and 39, 1.8 miles south of State Highway 28 in Frankfort.	2.61	1973-	05-02-83	8.50	105
03341150	Demaree Creek tributary near Byron, IN	Lat 39°52'39", long 87°05'56", in NW¼SW¼NE¼ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.15	1973-	05-01-83	6.53	30
03353668	White Lick Creek tributary near Brownsburg, IN	Lat 39°53'54", long 86°23'34", in SE¼NE¼SE¼ sec.22, T.17 N., R.1 E., Hendricks County, at culvert on State Highway 267, 4.0 miles north of U.S. Highway 136 in Brownsburg.	.31	1973-	07-04-32	5.96	56
03360400	Doans Creek tributary near Doans, IN	Lat 38°55'12", long 86°50'54", in SW¼SW¼SW¼ sec.27, T.6 N., R.4 W., Greene County, at culvert on State Highway 58 at Doans.	.20	1973-	12-25-82	6.31	49
03360600	Smothers Creek near Plainville, IN	Lat 38°48'43", long 87°07'48", in SE¼NW¼ sec.1, T.4 N., R.7 W., Daviess County, at county road bridge, 1.3 miles northeast of State Highway 57 in Plainville.	33[a]	1973-	05-01-83	16.61	1000
03364100	Tough Creek near Norristown, IN	Lat 39°22'19", long 85°45'38", in SW¼SW¼NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert on county road, 0.5 mile north of Norristown.	1.46	1973-	05-03-83	7.28	100
03371630	North Fork Salt Creek tributary near Nashville, IN	Lat 39°11'38", long 86°12'11", in NE¼NE¼NW¼ sec.28, T.9 N., R.3 E., Brown County, at culvert on State Highway 46, 2.6 miles east of State Highway 135 in Nashville.	.22	1973-	05-02-83	7.69	50
03373680	French Lick Creek tributary near French Lick, IN	Lat 38°30'08", long 86°36'20", in SW¼NW¼SW¼ sec.23, T.1 N., R.2 W., Orange County, at culvert on State Highway 145, 4.3 miles south of intersection of State Highways 145 and 56 in French Lick.	.29	1973-	10-09-82	8.02	171
03376340	Patoka River tributary near Glesen, IN	Lat 38°23'41", long 87°19'05", in NE¼SE¼SE¼ sec.29, T.1 S., R.8 W., Pike County, at culvert on State Highway 57, 7.9 miles south of intersection of State Highways 61, 56, and 57 in Petersburg.	.84	1973-	05-01-83	9.35	275
		STREAMS TRIBUTARY TO LAKE MICHIGAN					
		St. Joseph River basin					
04100800	Yellow Creek at Dunlap, IN	Lat 41°38'44", long 85°56'00", in NE¼NE¼ sec.27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33[a]	1974-80, 1983-	05-02-83	13.05	650

Crest-stage partial-record stations--continued

					Annual Maximum		
Station number	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (ft)	Discharge (ft^3/s)
		UPPER MISSISSIPPI RIVER BASIN					
		Illinois River basin					
05516950	Eagle Creek near Grovertown, IN	Lat 41°18'44", long 86°31'27", in NE¼SE¼NE¼ sec.16, T.33 N., R.1 W., Starke County, at bridge on State Highway 23, 0.3 mile south of County Road 100 north, and 5.2 miles south of U.S. Highway 30 in Grovertown.	32[a]	1973-	03-22-78	9.13	145
					-79	<8.96	<130
					-80	<8.96	<130
					06-14-81	10.36	225
					03-14-82	10.30	220
					07-02-83	9.85	190
05517780	Cobb ditch near Valparaiso, IN	Lat 41°24'41", long 87°08'08", in NE¼NE¼SW¼ sec.8, T.34 N., R.6 W., Porter County, at culvert on State Highway 2, 5.7 miles southwest of Valparaiso.	.39	1973-	07-02-83	9.54	82

[a] About.
[b] Insufficient data for peak

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations are given for 1983 in the following table. A few measurements for the 1981, 1982 and 1984 water years are also included.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN				
		Wabash River basin				
White River	Wabash River	Lat 39°52'35", long 86°08'17", in SE¼NW¼ sec.36, T.17 N., R.3E., Marion County, at Westfield Blvd. bridge, in Indianapolis.	1,239	1966	09-29-83	8.04
Williams Creek	White River	Lat 39°52'47", long 86°08'32", in NW¼NW¼ sec.36, T.17N., R.3E., Marion County, 150 ft above mouth, in Indianapolis.	22.2		09-29-83	2.35
White River	Wabash River	Lat 39°52'46", long 86°08'45", on line between secs. 35 and 36, T.17N., R.3E., Marion County, at College Ave. bridge, in Indianapolis.	1,261	1975-1977	09-29-83	11.6
White River	Wabash River	Lat 39°51'45", long 86°09'44", in SE¼NE¼ sec.2, T.16N., R.3E., Marion County at Kessler Blvd. bridge, in Indianapolis.		1963, 1966	08-04-83 09-29-83	69.5 12.3
White River	Wabash River	Lat 39°51'06", long 86°10'05", in NW¼NE¼ sec.11, T.16N., R.3E., Marion County, 0.5 mile south of Crows Nest, in Indianapolis.			09-29-83	16.6
White River	Wabash River	Lat 39°49'57", long 86°11'03", in NW¼SE¼ sec.15, T.16N., R.3E., Marion County, at U.S. Highway 421 bridge, Northwestern Ave., in Indianapolis.	1,269	1965, 1966	09-29-83	17.0
White River	Wabash River	Lat 39°49'52", long 86°11'23", in NE¼SW¼ sec.15., T.16N., R3E., Marion County, 0.3 mile downstream from U.S. Highway 421, near Wynnedale, in Indianapolis.			09-29-83	19.2
White River	Wabash River	Lat 39°49'05", long 86°11'23", in SE¼NW¼ sec.22, T.16N., R.3E., Marion County, at I-65 bridge, in Indianapolis.	1,270		09-29-83 10-04-83	21.5 17.9
White River	Wabash River	Lat 39°47'14", long 86°11'45", in NW¼SW¼ sec.34, T.16N., R.3E., Marion County, at 16th Street Dam, in Indianapolis.	1,294	1959, 1962, 1963	10-04-83	34.9
drain to White River	White River	Lat 39°47'13", long 86°11'42", in NW¼SW¼ sec.34, T.16N., R.3E., Marion County, below 16th Street Dam, in Indianapolis.			10-04-83	1.78
Fall Creek	White River	Lat 39°53'27", long 85°59'51", in NE¼SE¼ sec.30, T.17N., R.5E., Marion County, at East 75th Street bridge, in Indianapolis.	217		08-16-83	61.7
Fall Creek	White River	Lat 39°49'37", long 86°07'45", in SW¼SE¼sec.18, T.16N., R.4E., Marion County, at East 39th Street bridge, in Indianapolis.			08-16-83	8.45
Fall Creek	White River	Lat 39°47'20", long 86°10'40", in in SW¼NW¼ sec.35., T.16N., R.3E., Marion County, at West 16th Street bridge, in Indianapolis.		1976	03-03-83 05-04-83 09-29-83 10-04-83	93.9 2310 29.6 56.1
drain to Fall Creek	White River	Lat 39°46'50", long 86°10'45", in NE¼NE¼ sec. 3, T.15N., R3E., Marion County, 0.5 mile upstream from mouth, near Stadium Drive, in Indianapolis.			10-04-83	8.00

Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
drain to Fall Creek	White River	Lat 39°46'50", long 86°10'58", in NE¼NE¼ sec.3, T.15N., R.3E., Marion County, 0.3 mile upstream from mouth near Stadium Drive, in Indianapolis.		1972, 1973	10-04-83	4.15
White River tributary	White River	Lat 39°45'42", long 86°10'22", in SE¼NW¼ sec.11, T.15N., R.3E., Marion County, just upstream of Chevy Dam, 1900 feet downstream from Washington Street, in Indianapolis.			10-04-83	1.05
White River	Wabash River	Lat 39°45'40", long 86°10'24",in SW¼NW¼ sec.11, T.15N., R.3E., Marion County, just below Chevy Dam, 1900 feet downstream from Washington Street, in Indianapolis.			09-29-83 10-04-83	87.5 71.9
Pogues Run	White River	Lat 39°25'44", long 86°10'21", in NW¼SW¼ sec.11, T.15N., R.3E., Marion County, at mouth, and 1900 ft north of Morris Street Bridge, in Indianapolis.		1982	09-29-81 08-17-82 03-02-83 08-02-83 10-11-83	2.37 2.00 1.02 .46 .58
White River tributary	White River	Lat 39°45'22", long 86°10'20", in NW¼SW¼ sec.11, T.15N., R.3E., Marion County, at mouth, 200 ft downstream from Pogues Run, and 1700 ft upstream from Morris Street bridge, in Indianapolis.		1982	09-29-81 08-02-83	.02 2.42
Pleasant Run	White River	Lat 39°43'58", long 86°09'21", in SW¼NW¼sec. 24, T.15N., R.3E., Marion County, between Madison Ave. and Meridian Street, in Indianapolis.	20.6		03-02-83 10-11-83	3.78 2.79
Pleasant Run	White River	Lat 39°43'39", long 86°10'05", in NE¼SW¼ sec.23, T.15N., R.3E., Marion County, at West Street bridge in Indianapolis and 0.4 mile upstream from mouth.	21	1952, 1953, 1954, 1972, 1982,	09-29-81 08-02-83	55.3 2.18
Finley Creek	White River	Lat 40°01'32", long 86°16'39", in NW¼NW¼ sec.11, T.18N., R.2E., Boone County, at U.S. Highway 421 bridge and 0.4 mile southeast of Northfield.		1957	04-13-83	43.9
Eagle Creek	White River	Lat 39°59'54", long 86°16'38", on line between secs. 14 and 23, T.18N., R.2E., Boone County, at 146th Street bridge, near Zionsville.	59.5		04-13-83	203
Eagle Creek	White River	Lat 39°44'10", long 86°11'47", on line between secs. 21 and 22, T.15N., R.3E., Marion County, at Raymond Street bridge, in Indianapolis.		1982	09-21-81 03-03-83 05-04-83 08-02-83	52.3 57.4 831 32.3
Lick Creek	White River	Lat 39°42'10", long 86°11'12", in SE¼SW¼ sec.27, T.15 N., R.3 E., Marion County, at Harding Street bridge, in Indianapolis and 0.8 mile upstream from mouth.		1974, 1981, 1982	08-02-83	.78
White River	Wabash River	Lat 39°42'30", long 86°12'31", in SE¼SW¼ sec.28, T.15N., R.3E., Marion County, 0.4 mile downstream from IPALCO dam in Indianapolis, and 0.5 mile downstream from Lick Creek.	1,900	1981, 1982	08-02-83	270

Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
Haueisen ditch	White River	Lat 39°41'33", long 86°13'14", in SW¼SE¼ sec. 32, T.15N., R.3E., Marion County, at I-465 bridge over White River, in Indianapolis, and 0.1 mile upstream from mouth.		1981, 1982	08-02-83	12.8
White River	Wabash River	Lat 39°40'55", long 86°13'30", in NW¼SE¼ sec. 5, T.14N., R.3E., Marion County, 0.7 mile downstream from I-465 bridge over White River, in Indianapolis, and 1.7 miles upstream from Little Buck Creek.		1981, 1982	08-02-83	275
Little Buck Creek	White River	Lat 39°40'10", long 86°12'56", on line between secs. 8 and 9, T.14 N., R.3E., Marion County, 0.5 mile northeast of Southport WWTP, and 1.2 miles upstream from mouth.		1981, 1982	08-02-83	0
White River	Wabash River	Lat 39°39'47", long 86°14'10", on line between secs. 7 and 18, T.14 N., R.3E., Marion County, at Southport Road bridge, 0.25 mile downstream from Little Buck Creek and 0.7 mile west of Southport WWTP.	1,945	1965, 1982	03-03-83 05-05-83 08-02-83 10-12-83	663 8820 386 266
White River	Wabash River	Lat 39°36'23", long 86°14'30", in NW¼SW¼ sec.6, T.13N., R.3E., Johnson County, 0.9 mile downstream from Honey Creek, and 2.5 miles west of Smith Valley.		1981, 1982	08-02-83 08-03-83	349 375
White River	Wabash River	Lat 39°34'02", long 86°15'20", in NW¼SE¼ sec.13, T.13N., R.2E., Morgan County, at State Highway 144 bridge, and 1.1 miles northeast of Waverly.	2,025	1965, 1973, 1974, 1982	03-04-83 05-06-83 08-02-83 10-12-83	775 6240 470 306
White River	Wabash River	Lat 39°33'36", long 86°16'29", in NW¼NE¼ sec.23, T.13N., R.2E., Morgan County, at bridge over old State Highway 144, and 0.25 mile northwest of Waverly.	2,026	1964, 1965, 1972, 1973	07-07-82 09-07-82	783 420
White River	Wabash River	Lat 39°31'54", long 86°18'25",on line between secs. 27 and 28, T.13 N., R.2E., Morgan County, 3500 ft upstream from Crooked Creek, and 2.6 miles southwest of Waverly.		1982	08-02-83	436
White River	Wabash River	Lat 39°29'57", long 86°21'19", in NE¼NW¼ sec.7, T.12N., R.2E., Morgan County, at Henderson Road bridge, 1.4 miles downstream from Stotts Creek, and 2.4 miles southeast of Centerton.		1974, 1982	08-28-83	481
White Lick Creek	White River	Lat 39°30'49", long 86°22'48", on line between secs. 1 and 2, T.12N., R.1E., Morgan County, at County Road 590 North bridge, and 0.8 mile east of Centerton.	288	1974, 1981, 1982	08-28-83	22.1
White River	Wabash River	Lat 39°26'01", long 86°26'58", in NE¼SW¼ sec.32, T.12N. R.1E., Morgan County, at State Highway 39 bridge, and 1.3 miles northwest of Martinsville.	2,486	1925-27, 1930-32, 1946, 1948, 1965, 1967, 1970, 1982	08-02-83	504
White River	Wabash River	Lat 39°24'12", long 86°27'43", in NW¼SE¼ sec.7, T.11N., R.1E., Morgan County, below Martinsville WWTP, and 2.4 miles southwest of Martinsville.		1981, 1982	08-02-83	563

Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
White River	Wabash River	Lat 39°22'23", long 86°33'32", in NW¼SW¼ sec.20, T.11 N., R.1W., Morgan County, at Paragon bridge, 1,200 feet upstream from Bryant Creek, and 1.5 miles south of Paragon.		1965, 1982	08-02-83	560
Patoka River	Wabash River	Lat 38°22'47", long 87°01'00", in SW¼SW¼ sec.31, T.1S., R.5W., Dubois County, at County Road 600 west bridge, 0.3 mile upstream from Altar Creek, and 2.7 miles south of Ireland.	466		08-23-83	377
Flat Creek	Patoka River	Lat 38°23'08", long 87°03'29", in NE¼SE¼ sec.34, T.1S., R.6W., Dubois County, at County Road 50 north bridge, 0.2 mile upstream from Sulphur Springs Brook, and 3.9 miles southwest of Ireland.			08-23-83	.52
Beadens Creek	Cup Creek	Lat 38°19'01", long 87°07'57", in NW¼NE¼ sec.25, T.2S., R.7W., Pike County, at County Road bridge, 0.35 mile north of State highway 257, 0.55 miles north of State Highway 64, and 3.3 miles east of Augusta.			08-23-83	.19
Patoka River	Wabash River	Lat 38°22'21", long 87°09'17", in SW¼NE¼ sec.2, T.2S., R.7W., Pike County, at County Road Bridge, 0.1 mile south of Survant, 0.5 mile upstream from Hog Branch, and 3.4 miles northeast of Augusta.			08-24-83	391
Mill Creek	Patoka River	Lat 38°22'09", long 87°11'14", in NE¼SE¼ sec.4, T.2S., R.7W., Pike County, at County Road bridge, 0.95 mile north of State Highway 364, 1.8 miles southeast of Winslow, and 2.6 miles north of Augusta.			08-24-83	.92
Patoka River tributary	Patoka River	Lat 38°21'20", long 87°11'37", in SE¼NW¼ sec.9, T.2S., R.7W., Pike County, at bridge on State Highway 364, 0.8 mile above mouth, 1.6 miles north of Augusta, and 2.3 miles east of State Highway 61.			08-23-83	.36
Patoka River	Wabash River	Lat 38°22'48", long 87°13'00", in SW¼SW¼ sec.32, T.1S. R.7W., Pike County, at bridge on State Highway 61, and at south side of Winslow.	603	1961-74, 1976, 1977	08-24-83	386
Stone Coe Creek	Patoka River	Lat 38°23'40", long 87°13'12", on line between secs. 29 and 30, T.1S., R.7W., Pike County at State Highway 61 bridge, and 0.9 mile north of Winslow.		1964, 1965	08-25-83	3.31
Barren ditch	Patoka River	Lat 38°22'00", long 87°15'22", in NW¼SW¼ sec.1, T.2S., R.8W., Pike County, at County Road bridge, 0.7 mile east of Murch, and 5.2 miles northeast of Oakland City.			08-25-83	.82
Sugar Creek	Patoka River	Lat 38°23'03", long 87°16'41", on line between secs. 34 and 35, T.1S., R.8W., Pike County, 200 feet east of Line Road, 350 feet above mouth, and 2.6 miles south east of Glezen.			08-25-83	.001

Measurements at miscellaneous sites--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		OHIO RIVER BASIN--Continued				
		Wabash River basin--Continued				
Patoka River	Wabash River	Lat 38°22'57", long 87°19'59", in NW¼SW¼ sec.32, T.1S., R.8W., Pike County, at bridge on State Highway 57, 0.75 mile north of Dongola, and 2.9 miles southwest of Glezen.	650		08-25-83	394
South Fork Patoka River tributary	South Fork Patoka River	Lat 38°14'17", long 87°10'55", in NE¼SE¼ sec.21, T.3S., R.7W., Pike County, at County Road bridge, 0.5 mile north of Warrick-Pike County line, 0.6. mile upstream from mouth, and 2.9 miles southwest of Stendal.			08-24-83	.49
South Fork Patoka River	Patoka River	Lat 38°14'45", long 87°11'21", on line between secs. 16 and 21, T.3S., R.7W., Pike County, at County Road bridge, 1 mile north of Warrick-Pike County line, and 2.9 miles southwest of Stendal.		1964	08-24-83	.74
Durham ditch	South Fork Patoka River	Lat 38°17'34", long 87°13'25", in NW¼SE¼ sec.31, T.2S., R.7W., ike Pike County, at County Road e, bridge, 0.25 mile above mouth, and 3.2 miles southwest of Augusta. miles southwest of Augusta.	6.26		08-23-83	3.00
Rough Creek	South Fork Patoka River	Lat 38°17'08", long 87°14'32", on line between sec.6, T.3S., R.7W., and sec.1, T.3S., R.8W., Pike County, at County Road bridge, 1.3 miles west of Scottsburg, and 1.1 miles east of Enos Corner and State Highway 61.		1964	08-24-83	7.62
Honey Creek	South Fork Patoka River	Lat 38°17'22", long 87°15'55", on line between sec.35, T.2S., R.8W., and sec.2, T.3S., R.8W., Pike County, at bridge on Blackfoot Road, 0.25 mile west of State Highway 61 and Enos Corner, and 0.65 mile above mouth.		1965	08-24-83	2.78
South Fork Patoka River	Patoka River	Lat 38°22'40", long 87°20'14", in SE¼SE¼ sec.31, T.1S., R.8W., Gibson County, at bridge on State Highway 57, 0.4 mile north of Dongola, 0.9 mile above mouth, and 3.4 miles southwest of Glezen.	76.3	1966, 1967	08-25-83	17.1
Patoka River	Wabash River	Lat 38°22'38", long 87°22'14", on line between secs., 1 and 2, T.2S., R.9W., Pike County, at bridge on Miller Road, 3.0 miles northwest of Oakland City, and 4.6 miles southwest of Glezen.		1965, 1967	08-25-83	415

DISCONTINUED GAGING-STATION RECORDS

The following table lists all discontinued stream-gaging stations in Indiana. Continuous daily streamflow records were collected and published for the period of record, shown in water years, for each station.

Station no.	Station name	County	Drainage area (mi^2)	Period of Record
03275500	East Fork Whitewater River at Richmond	Wayne	121	1949-78
03277000	Laughery Creek near Farmers Retreat	Ohio	248	1941-73[a]
03303276	Friday Branch tributary near Saint Meinrad	Dubois	.096	1981[b]
03304000	Little Pigeon Creek near Tennyson	Warrick	187	1944-47
03323000	Wabash River at Bluffton	Wells	532	1931-71[b]
03326000	Mississinewa River near Eaton	Delaware	310	1952-71[b]
03329500	Wabash River at Delphi	Carroll	4,072	1940-71
03331000	Tippecanoe River near Warsaw	Kosciusko	126	1943-49
03332000	Tippecanoe River at Pulaski	Pulaski	1,089	1928-31
03332300	Little Indian Creek near Royal Center	White	35.0	1959-73[a]
03332400	Big Monon Creek near Francesville	Pulaski	152	1959-73[a]
03332500	Tippecanoe River near Monticello	White	1,732	1932-81[c]
03333500	Wildcat Creek at Greentown	Howard	168	1945-61
03334000	Wildcat Creek at Owasco	Carroll	396	1944-73[a]
03339120	Coal Creek at Coal Creek	Fountain	214	1965-72
03339150	Little Vermilion River near Newport	Vermillion	237	1965-72
03339855	Sugar Creek tributary near Deer Mill	Montgomery	.45	1981[b]
03340000	Sugar Creek near Byron	Parke	670	1941-71[b]
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58[d]
03341200	Little Raccoon Creek near Catlin	Parke	134	1957-71[d,e]
03341420	Brouilletts Creek near Universal	Vermillion	321	1966-71[b]
03341470	North Coal Creek near Terre Haute	Vigo	1.91	1974-76
03341570	Honey Creek near Riley	Vigo	5.79	1981[b]
03342250	Mud Creek near Dugger	Sullivan	11.9	1966-81
03342350	Buttermilk Creek near Paxton	Sullivan	16.5	1966-73
03342360	Buttermilk Creek near Sullivan	Sullivan	17.6	1975-78
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75[b,e]
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68
03348500	White River near Noblesville	Hamilton	828	1915-26, 1929-74[b]
03349500	Cicero Creek near Arcadia	Hamilton	131	1955-76[a]
03349700	Little Cicero Creek near Arcadia	Hamilton	40.4	1956-76[a]
03350000	Cicero Creek near Cicero	Hamilton	196	1946-54
03350100	Hinkle Creek near Cicero	Hamilton	18.5	1956-76[a]
03350500	Cicero Creek at Noblesville	Hamilton	216	1950-80[d]
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56, 1958-69
03352200	Mud Creek at Indianapolis	Marion	42.4	1958-76[a]
03353160	Pleasant Run at Brookville Road at Indianapolis	Marion	10.1	1960-81
03355000	Bear Creek near Trevlac	Brown	6.94	1952-73[a]
03356000	Beanblossom Creek at Dolan	Monroe	100	1946-78
03356500	Beanblossom Creek near Bloomington	Monroe	112	1931-33
03357000	White River at Spencer	Owen	2,988	1925-71[d]
03357420	Big Walnut Creek at Greencastle	Putnam	216	1975-1982
03359500	Deer Creek near Putnamville	Putnam	59.0	1955-65, 1968-72
03359980	Jordan Creek near Jordan	Owen	25.9	1981[b]
03366000	Graham Creek near Vernon	Jennings	77.2	1955-73
03367000	Muscatatuck River near Austin	Jackson	359	1932-43, 1944-71[f]
03367500	Stucker Creek near Austin	Scott	127	1932-33
03370000	Vernon Fork near Crothersville	Jackson	391	1932-33
03370500	Muscatatuck River near Tampico	Washington	960	1939
03371000	Muscatatuck River near Vallonia	Jackson	1,134	1932-33
03371600	South Fork Salt Creek at Kurtz	Jackson	38.2	1961-71[g]
03371650	North Fork Salt Creek at Nashville	Brown	76.1	1962-76[a]
03372000	North Fork Salt Creek near Belmont	Brown	120	1946-71
03372700	Clear Creek near Harrodsburg	Monroe	55.2	1960-71
03373000	Salt Creek near Peerless	Lawrence	573	1939-50, 1957-71[d]
03373200	Indian Creek near Springville	Lawrence	60.7	1961-73[a]
03374100	White River at Hazleton	Gibson	11,305	1928-38[h]
03376000	Patoka River near Jasper	Dubois	348	1944-47[e]
03376260	Flat Creek near Otwell	Pike	21.3	1965-1982
03376279	Little Flat Creek near Otwell	Dubois	6.56	1981[b]
03376300	Patoka River at Winslow	Pike	603	1964-74
03378500	Wabash River at New Harmony	Posey	29,234	1939-47[h]

Station no.	Station name	County	Drainage area (mi^2)	Period of Record
	STREAMS TRIBUTARY TO LAKE MICHIGAN			
04093200	Little Calumet River at Gary	Lake	5.82	1958-67, 1969-71
04090500	Dunes Creek at Porter	Porter	3.40	1979-1982
04095100	Derby ditch at Beverly Shores	Porter	4.64	1980
04098000	Fawn River at Orland	Steuben	86.4	1943-47
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1946-74
04099610	Pretty Lake Inlet near Stroh	Lagrange	1.96	1963-80
04100000	Christiana Creek at Elkhart	Elkhart	127	1947-52
04100220	North Branch Elkhart River near Cosperville	Noble	134	1951-71
	STREAMS TRIBUTARY TO LAKE ERIE			
04178500	St. Joseph River at Hursh	Allen	734	1950-54
04179000	St. Joseph River at Cedarville	Allen	763	1931-32, 1956-81
04179500	Cedar Creek near Auburn	DeKalb	87.3	1943-73[a]
04180500	St. Joseph River near Ft. Wayne	Allen	1,057	1905-06, 1941-55
04182700	St. Marys River at Ft. Wayne	Allen	810	1905-06
	UPPER MISSISSIPPI RIVER BASIN			
05516000	Yellow River near Bremen	Marshall	135	1955-73[a]
05518500	Singleton ditch near Hebron	Lake	34.2	1949-51
05519500	West Creek near Schneider	Lake	54.7	1948-52, 1954-72
05520000	Singleton ditch at Illinoi, Il	Kankakee, Il	220	1945-77
05521500	Oliver ditch near Aix	Jasper	79.6	1948-51
05523500	Slough Creek near Collegeville	Jasper	83.7	1948-52 1953-82
05524000	Carpenter Creek at Eygpt	Jasper	44.8	1948-52 1953-82

[a] Continued as a crest-stage and low-flow partial-record station.
[b] Some quality of water data available.
[c] Records of daily discharges furnished by Northern Indiana Public Service Company.
[d] Continued as a stage only station.
[e] Some record fragmentary.
[f] High-water records only.
[g] Stage only station 1972-75.
[h] Some quality of water data available after discontinuing of station for stream-gaging records.

For many years records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records before 1976 were based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations. Starting in 1976, water-stage recorders were installed at many stations which had previously been non-recording gages. Discharge measurements, made at the outflow, are also available in some instances.

The lakes for which records have been collected are listed by downstream order number in the following table. The established level, sometimes referred to as the legal level, is that elevation set by the courts to which the average level of the lake is to be held; it is normally set at about the average level that has prevailed for a number of years prior to the establishment of the level. Surface area and capacity of lake is that surface area and capacity at the established level. Depth contour maps are only those surveyed by the Water Resources Division of the Geological Survey. The inclusive years that records of stage have been collected at a lake are shown in the last column. If records are still being collected on a current basis, there is no closing date shown.

Lakes in the Ohio River basin for which records are available

	Lake	County	Drainage (mi²)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
		LAUGHERY CREEK BASIN						
03276800	Versailles Lake near Versailles	Ripley	168.0	232	--------	------	-	1957-
		BAYOU DRAIN BASIN						
03322300	Hovey Lake near Mount Vernon	Posey	6.36	253	--------	------	-	1950-69
		WABASH RIVER BASIN						
03327550	Everett Lake at Levert	Allen	1.07	43	835.13	650	+	1946-66
03327600	Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+	1946-69, 1976-
03327650	Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	------	-	1943-
03327700	Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	------	-	1943-49
03327750	Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	------	-	1943-53
03327800	Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+	1946-52
03327850	Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+	1946-52
03328100	Long Lake at Laketon	Wabash	.55	48	751.19	760	+	1946-51, 1959-
03328250	North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+	1947-
03328350	Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+	1947-
03328400	Lukens Lake near Disko	Wabash	1.76	46	763.60	1,010	+	1948-49, 1959-
03330020	Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+	1943-53
03330040	Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+	1943-75 1976-
03330060	Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+	1945-53
03330080	Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+	1943-66
03330100	New Lake near Etna	Whitley	.29	50	903.91	880	+	1945-53
03330120	Old Lake near Etna	Whitley	2.81	32	898.07	620	+	1949-66
03330140	Smalley Lake near Washington Center	Noble	27.1	69	--------	1,520	+	1943-
03330160	Gilbert Lake near Washington Center	Noble	.37	28	--------	490	+	1954-
03330180	Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+	1945-66
03330200	Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+	1945-51
03330220	Wilmot Pond at Wilmot[1]	Noble	35.2	10	------	------	-	1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	7,170	+	1943-
03330243	James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+	1943-
03330260	Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+	1946-51
03330280	Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+	1945-52
03330300	Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+	1943-
03330320	Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+	1945-
03330340	Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+	1945-
03330360	Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+	1945-
03330380	Shoe Lake near Oswego	Kosciusko	.34	40	841.57	------	-	1946-53, 1972,74, 1976-
03330400	Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+	1945-
03330420	Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+	1945-
03330440	Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+	1945-
03330460	Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+	1945-
03330480	Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+	1943-
03330495	Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+	1943-
03331010	Big Chapman Lake near Warsaw[2]	Kosciusko	4.17	581	827.75	6,080	+	1945-72, 1976-
03331020	Little Chapman Lake near Warsaw	Kosciusko	7.13	177	827.75	1,990	+	1945-72, 1976-
03331040	Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+	1954-
03331060	Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	------	-	1951-66
03331080	Muskellunge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03331120	Sherburn Lake near Pierceton[3]	Kosciusko	5.51	15	881.00	230	+	1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-

Lakes in the Ohio River basin for which records are available--Continued

WABASH RIVER BASIN--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
03331160	Center Lake at Warsaw	Kosciusko	.73	120	803.86	2,060	+	1945-
03331180	Palestine Lake at Palestine	Kosciusko	32.4	290	--------	1,170	+	1954-
03331200	Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+	1945-51
03331220	Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+	1945-53
03331240	Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+	1947-53
03331260	Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+	1947-53
03331280	McClures Lake near Silver Lake	Kosciusko	1.29	32	865.85	410	+	1945-52
03331300	Hill Lake near Silver Lake	Kosciusko	0.85	67	871.50	1,300	+	1952-
03331320	Diamond Lake near Silver Lake	Kosciusko	3.92	79	--------	1,280	+	1954-
03331340	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+	1945-53
03331360	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+	1946-66
03331370	Town Lake near Akron	Fulton	2.77	23	--------	220	+	1949-50
03331380	Lake Manitou at Rochester	Fulton	44.2	1,158	778.41	10,165	+	1943-
03331390	Zink Lake near Rochester	Fulton	1.11	19	810.68	------	-	1952-55
03331400	Nyona Lake near Greenoak	Fulton	7.59	104	793.91	1,340	+	1946-
03331420	South Mud Lake near Fulton	Fulton	4.53	94	793.42	1,020	+	1946-66
03331438	King Lake near Delong	Fulton	1.98	18	--------	180	+	1971-
03331440	Maxinkuckee Lake at Culver	Marshall	13.7	1,864	733.12	45,600	+	1943-
03331460	Lost Lake near Culver[4]	Marshall	14.2	40	732.00	------	-	1954-
03331480	Langenbaum Lake near Monterey	Starke	.72	48	717.96	260	+	1954-66
03331700	Bruce Lake at Bruce Lake	Pulaski	6.38	245	723.69	1,790	+	1943-53
03332200	Fletcher Lake at Fletcher	Fulton	.67	45	783.20	880	+	1946-53
03370900	Starve Hollow Lake near Vallonia	Jackson	6.67	145	--------	980	+	1946-61, 1963-71
03371700	Ogle Lake near Nashville	Brown	1.03	20	--------	250	+	1954-

Lakes in the St. Lawrence River basin for which records are available

STREAMS TRIBUTARY TO LAKE MICHIGAN

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
04092500	Wolf Lake at Hammond[3]	Lake	5.72	999	--------	------	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	------	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	3.18	424	--------	3,490	+	1954-69, 1971- 1976-
04097550	Lake George at Jamestown	Steuben	[8]14.7	488	985.28	------	-	1946-
04097596	Marsh Lake near Fremont	Steuben	14.9	-----	--------	------	-	1967-69
04097600	Little Otter Lake near Fremont	Steuben	15.7	34	965.18	740	+	1946-53
04097640	Big Otter Lake near Fremont	Steuben	21.3	69	965.18	1,780	+	1946-53
04097650	Snow Lake at Lake James	Steuben	[8]40.2	310	964.96	7,998	+	1943-49
04097660	Lake James at Lake James	Steuben	[8]47.8	1,034	964.96	33,585	+	1943-49
04097680	Jimmerson Lake at Nevada Mills[5]	Steuben	[8]51.6	434	964.66	4,394	+	1946-
04097780	Loon Lake near Angola	Steuben	2.13	138	1,011.98	630	+	1954-66
04097850	Crooked Lake at Crooked Lake	Steuben	10.4	828	988.17	10,555	+	1946-
04097950	Lake Gage at Panama	Steuben	[8]17.3	332	954.25	10,140	+	1946-
04097960	Lime Lake at Panama	Steuben	[8]17.5	57	954.25	427	+	1946-
04098100	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+	1953-54
04098110	Mud Lake near Orland	Steuben	1.85	25	939.01	------	-	1956-67
04098300	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+	1948-51
04099050	Pigeon Lake near Angola	Steuben	[8]35.2	61	988.24	930	+	1954-63
04099100	Fox Lake near Angola	Steuben	[8]1.25	142	1,018.83	3,150	+	1946-53
04099190	Pleasant Lake at Pleasant Lake	Steuben	[8]1.12	53	963.52	1,190	+	1946-66
04099200	Long Lake at Moonlight	Steuben	[8]67.9	92	--------	1,540	+	1946-
04099250	Bower Lake near Pleasant Lake	Steuben	[8]84.6	25	948.50	280	+	1946-71, 1976-
04099260	Golden Lake near Pleasant Lake	Steuben	[8]88.8	119	948.50	1,810	+	1946-71, 1976-
04099400	Silver Lake near Angola	Steuben	[8]3.79	238	959.40	2,540	+	1945-53
04099430	Bass Lake near Angola	Steuben	[8].39	61	979.68	450	+	1954-66
04099440	Howard Lake near Angola	Steuben	[8]3.90	27	977.34	130	+	1954-63
04099500	Hogback Lake near Angola	Steuben	[8]103	146	948.50	1,450	+	1946-
04099520	Otter Lake near Flint	Steuben	[8]6.91	118	934.15	1,960	+	1954-66
04099540	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+	1946, 1954-66
04099560	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+	1945-66
04099575	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+	1951-74, 1976-
04099580	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+	1951-74, 1976-
04099600	Big Long Lake near Stroh	Lagrange	4.77	388	956.2	------	-	1954-
04099620	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+	1949-53, 1963-65
04099640	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+	1945-66
04099660	Royer Lake near Plato	Lagrange	4.69	69	936.50	1,630	+	1952-
04099670	Fish Lake near Plato	Lagrange	[8]10.6	100	936.50	4,050	+	1945-
04099700	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+	1953-
04099710	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+	1953-70
04099740	Shipshewana Lake near Shipshewana	Lagrange	[8]6.74	202	852.04	1,350	+	1951-
04099760	Fish Lake near Scott	Lagrange	[8]6.21	139	814.42	2,560	+	1954-73, 1976-

Lakes in the St. Lawrence River basin for which records are available--Continued

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
04099780	Stone Lake near Scott	Lagrange	1.51	152	8[illegible]8.76	2,060	+	1954-73, 1976-
04099800	Emma Lake near Emma	Lagrange	13.6	42	880.87	700	+	1954-66
04099810	Cass Lake near Shipshewana	Lagrange	.68	89	--------	873	+	1970-
04099820	Hunter Lake near Middlebury	Elkhart	.51	99	856.90	1,120	+	1946-53
04099840	Wolf Lake near Goshen	Elkhart	[8]1.29	100	813.00	------	-	1947-57
04099860	Heaton Lake near Elkhart	Elkhart	9.33	87	767.30	640	+	1946-53, 1969-74, 1976-
04099880	Simonton Lake near Elkhart	Elkhart	7.44	303	772.19	1,560	+	1946-
04099950	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04100010	Cree Lake near Kendallville	Noble	4.85	59	945.23	910	+	1949-66
04100020	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04100030	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-
04100040	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04100050	Witmer Laker near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-
04100060	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-
04100070	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-
04100080	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-
04100090	Olin Lake neaqr Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	15,358	+	1945-
04100110	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-
04100120	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-
04100130	Jones Lake near Cosperville[6]	Noble	70.3	114	885.55	960	+	1948-
04100140	Bixler Lake at Kendallville	Noble	5.28	120	963.65	2,090	+	1945-
04100150	Round Lake at Kendallville	Noble	3.47	99	954.50	2,140	+	1954-
04100160	Little Long Lake at Kendallville	Noble	4.55	71	954.50	1,750	+	1954-
04100170	Latta Lake near Rome City	Noble	2.52	42	918.71	900	+	1954-66
04100180	Sylvan Lake at Rome City	Noble	33.8	669	916.20	5,986	+	1943-
04100190	Sacarider Lake near Kendallville	Noble	1.43	33	--------	740	+	1954-63
04100200	Tamarack Lake near Cosperville	Noble	15.9	50	885.55	880	+	1948-
04100210	Steinbarger Lake near Cosperville	Noble	[illegible]4.3	73	885.55	1,590	+	1948-
04100220	Waldron Lake near Cosperville	Noble	134	216	885.55	3,120	+	1948-
04100230	Long Lake near Burr Oak	Noble	12.0	40	895.82	630	+	1954-71
04100240	Sand Lake near Burr Oak	Noble	14.9	47	893.56	1,270	+	1946-51
04100250	Rivir Lake near Burr Oak	Noble	18.6	24	--------	380	+	1954-65
04100258	High Lake near Wolflake	Noble	4.43	123	896.35	1,240	+	1961-
04100260	Bear Lake near Wolflake	Noble	6.98	136	894.60	3,030	+	1943-
04100280	Muncie Lake near Burr Oak	Noble	42.8	47	--------	580	+	1954-
04100290	Silver Lake near Wolflake	Noble	.28	34	--------	220	+	1953-63
04100300	Skinner Lake near Albion	Noble	14.0	125	927.74	1,750	+	1945-72, 1977-
04100310	Pleasant Lake near Wolflake	Noble	.29	20	--------	540	+	1952-53
04100320	Upper Long Lake near Wolflake	Noble	2.08	86	891.19	1,900	+	1956-
04100330	Lower Long Lake near Albion	Noble	4.35	66	889.81	1,560	+	1946-52
04100340	Eagle Lake near Kimmel	Noble	3.22	81	--------	1,050	+	1946-48
04100350	Diamond Lake near Wawaka	Noble	4.80	105	--------	2,580	+	1946-
04100360	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04100370	Engle Lake near Ligonier	Noble	[8]4.19	48	--------	670	+	1956-71, 1977-
04100380	Harper Lake near Washington Center	Noble	2.76	11	878.25	160	+	1946-
04100390	Knapp Lake near Washington Center	Noble	6.02	88	878.25	3,040	+	1946-
04100400	Moss Lake near Washington Center	Noble	6.12	9	878.25	80	+	1946-
04100410	Hindman Lake near Washington Center	Noble	3.66	13	878.25	140	+	1946-
04100420	Gordy Lake near Cromwell	Noble	9.40	31	876.68	680	+	1953-66
04100425	Rider Lake near Cromwell	Noble	10.9	5	876.68	30	+	1953-66
04100430	Duely Lake near Cromwell[7]	Noble	11.2	21	876.68	180	+	1953-66
04100440	Village Lake near Cromwell	Noble	12.0	12	876.68	160	+	1953-66
04100446	Flatbelly Lake near Syracuse	Kosciusko	4.66	326	--------	------	-	1964-69
04100448	Papakeechie Lake near Syracuse	Kosciusko	5.52	300	--------	------	-	1964-69
04100450	Wawasee Lake at Wawasee	Kosciusko	36.9	3,060	858.89	67,210	+	1943-66
04100460	Syracuse Lake at Syracuse	Kosciusko	38.2	414	858.87	5,360	+	1943-
04100470	Dewart Lake near Leesburg	Kosciusko	[8]8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	[8]14.6	187	829.79	4,750	+	1946-53

STREAMS TRIBUTARY TO LAKE ERIE

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
04177200	Clear Lake at Clear Lake	Steuben	6.86	800	1,037.38	24,990	+	1943-
04177210	Round Lake at Clear Lake	Steuben	7.25	30	1,037.38	340	+	1943-
04177300	Long Lake near Ray	Steuben	2.80	154	--------	1,840	+	1961-63
04177680	Ball Lake near Hamilton	Steuben	11.6	87	894.76	3,520	+	1961-
04177700	Hamilton Lake at Hamilton	Steuben	16.5	802	898.83	16,600	+	1943-
04179200	Indian Lake near Corunna	DeKalb	3.76	56	--------	1,220	+	1957
04179300	Cedar lake near Waterloo	DeKalb	23.4	28	896.76	230	+	1943-56

Lakes in the Upper Mississippi River basin for which records are avaliable

ILLINOIS RIVER BASIN

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
05514740	Saugany Lake near Rolling Prairie	LaPorte	[8]2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-

Lakes in the Upper Mississippi River basin for which records are available--Continued

	Lake	County	Drainage (square mile)	Surface Area (acres)	Established Levelxx	Capacity (acre feet)	Contour Map available	Records available
			ILLINOIS RIVER BASIN--Continued					
05514750	North Chain Lake at Lydick	St. Joseph	[8]3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	[8]6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	[8]1.85	-----	--------	------	-	1960-
05514900	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	------	-	1946-66
05515200	Upper Fish Lake near Stillwell	LaPorte	[8]9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	[8]10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	[8]10.7	564	796.20	------	-	1946-75 1980-
05515230	Stone Lake at LaPorte	LaPorte	[8]10.7	140	796.20	------	-	1946-75 1980-
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75 1980-
05515600	Koontz Lake at Koontz Lake	Starke	[8]6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	[8]11.7	77	817.50	640	+	1946-73, 1976-
05516200	Lake of the Woods near Bremen	Marshall	[8]9.45	416	803.85	6,810	+	1945-
05516600	Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05516700	Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05516800	Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	[8]5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	[8]25.5	24	713.25	160	+	1946-53
05517100	Skits Lake near Knox	Starke	------	1,000	--------	------	-	1949-53
05517200	Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	------	-	1943-
05517600	Wauhob Lake near Valparaiso	Porter	.40	21	--------	------	-	1946-
05517650	Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05517670	Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05517700	Flint Lake near Valparaiso	Porter	2.62	86	797.66	------	-	1946-
05517800	Lake Eliza near Beatrice	Porter	1.70	45	738.70	------	-	1954-74, 1976-
05518700	Cedar Lake at Cedar Lake	Lake	8.14	781	--------	6,750	+	1943-
05518800	Dalecarlia Lake near Creston	Lake	20.1	193	--------	------	-	1947-52
05521300	Ringneck Lake near Medaryville	Jasper	1.94	1,400	--------	------	-	1949-55
05525700	J.C. Murphy Lake near Morocco	Newton	13.0	1,515	--------	------	-	1952-61

[+] Depth contour maps available for sale by Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

xxElevation, in feet, above mean sea level.

[1] Formerly published as Rider Lake at Wilmot.

[2] Formerly published as Chapman Lake near Warsaw.

[3] Formerly published as Johnson Lake near Pierceton.

[4] Formerly published as Hawks Lake near Culver.

[5] Formerly published as Jimerson Lake at Nevada Mills.

[6] Formerly published as Sanford Lake near Cooperville.

[7] Formerly published as Duley Lake near Cromwell, and Druely Lake near Cromwell, and Druley Lake near Cromwell.

[8] Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.

[9] Same as Wolf Lake at Chicago, Illinois WRD District.

OTHER LAKE MAPS AVAILABLE

The lakes in Indiana which are not included in the cooperative stabilization program but which have been mapped for recreational purposes are shown in the following table. Surface area and capacities are related to reference mean sea level elevation at time of mapping. Additional data is shown on map which are available for sale by the Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

Lake	County	Surface Area (acres)	Capacity (acre-feet)	Lake	County	Surface Area (acres)	Capacity (acre-feet)
			OHIO RIVER BASIN				
Barr Lake	Fulton	22	470	Lake 16	Fulton	27	220
Bischoff Reservoir	Ripley	200	1,920	Larwill Lake	Whitley	9	170
Black Lake	Whitley	24	400	Lenape Lake	Greene	36	330
Bowen Lake	Scott	7	60	Lincoln Park Lake	Spencer	58	520
Brown Lake	Whitley	23	580	Little Pike Lake	Kosciusko	25	140
Caldwell Lake	Kosciusko	45	900	McColley Lake	Wabash	28	410
Crane Lake	Noble	28	360	Round Lake	Wabash	48	540
Crosley Lake	Jennings	14	130	Scales Lake	Warrick	66	520
Ferdinand Lake	Dubois	42	440	Schlamm Lake	Clark	19	170
Franke Lake	Clark	9	70	Sellers Lake	Kosciusko	32	340
Harts Lake	Starke	28	370	Shakamak Lake	Sullivan	56	610
Kunkel Lake	Wells	25	150	Twin Lakes	Wabash	18	190
Lake Freeman	Carroll	1,547	26,000	Whitewater Lake	Union	199	3,650
Lake Shafer	White	1,291	13,120	Yellowwood Lake	Brown	133	1,890
			STREAMS TRIBUTARY TO LAKE MICHIGAN				
Appleman Lake	Lagrange	52	590	Mateer Lake	Lagrange	18	150
Bartley Lake	Noble	34	430	Miller Lake	Noble	11	160
Barton Lake	Steuben	94	1,340	Millers Lake	Noble	28	410
Bell Lake	Steuben	38	510	Mud Lake	Noble	8	70
Boner Lake	Kosciusko	40	370	Norman Lake	Noble	14	280
Bowen Lake	Noble	30	1,080	Pigeon Lake	Lagrange	61	1,160
Bristol Lake	Noble	27	740	Port Mitchell Lake	Noble	15	180
Buck Lake	Lagrange	18	150	Rainbow Lake	Lagrange	16	250
Center Lake	Steuben	46	390	Schockopee Lake	Noble	21	280
Cline Lake	Lagrange	20	350	Shock Lake	Kosciusko	37	1,210
Deer Lake	Noble	36	420	Smith Hole	Lagrange	2	10
Dock Lake	Noble	16	230	Still Lake	Lagrange	30	620
Eve Lake	Lagrange	31	670	Sweet Lake	Noble	16	210
Fish Lake	Steuben	59	750	Tamarack Lake	Noble	84	1,340
Hog Lake	LaPorte	59	690	Walters Lake	Steuben	53	550
Hog Lake	Steuben	48	570	Weir Lake	Lagrange	6	70
Lime Lake	Steuben	30	330	Wible Lake	Noble	49	650
Little Turkey Lake	Steuben	58	780	Williams Lake	Noble	46	1,070
Marl Lake	Noble	30	510	Wyland Lake	Kosciusko	6	100
			STREAMS TRIBUTARY TO LAKE ERIE				
Dunton Lake	DeKalb	21	340	Mirror Lake	Steuben	9	120
Handy Lake	Steuben	16	290	Terry Lake	DeKalb	17	160
Lake Anne	Steuben	17	280				
			UPPER MISSISSIPPI RIVER BASIN				
Cook Lake	Marshall	93	1,650	Gilbert Lake	Marshall	37	490
Dixon Lake	Marshall	33	480	Holem Lake	Marshall	40	390
Flat Lake	Marshall	26	210	Lawrence Lake	Marshall	69	1,580

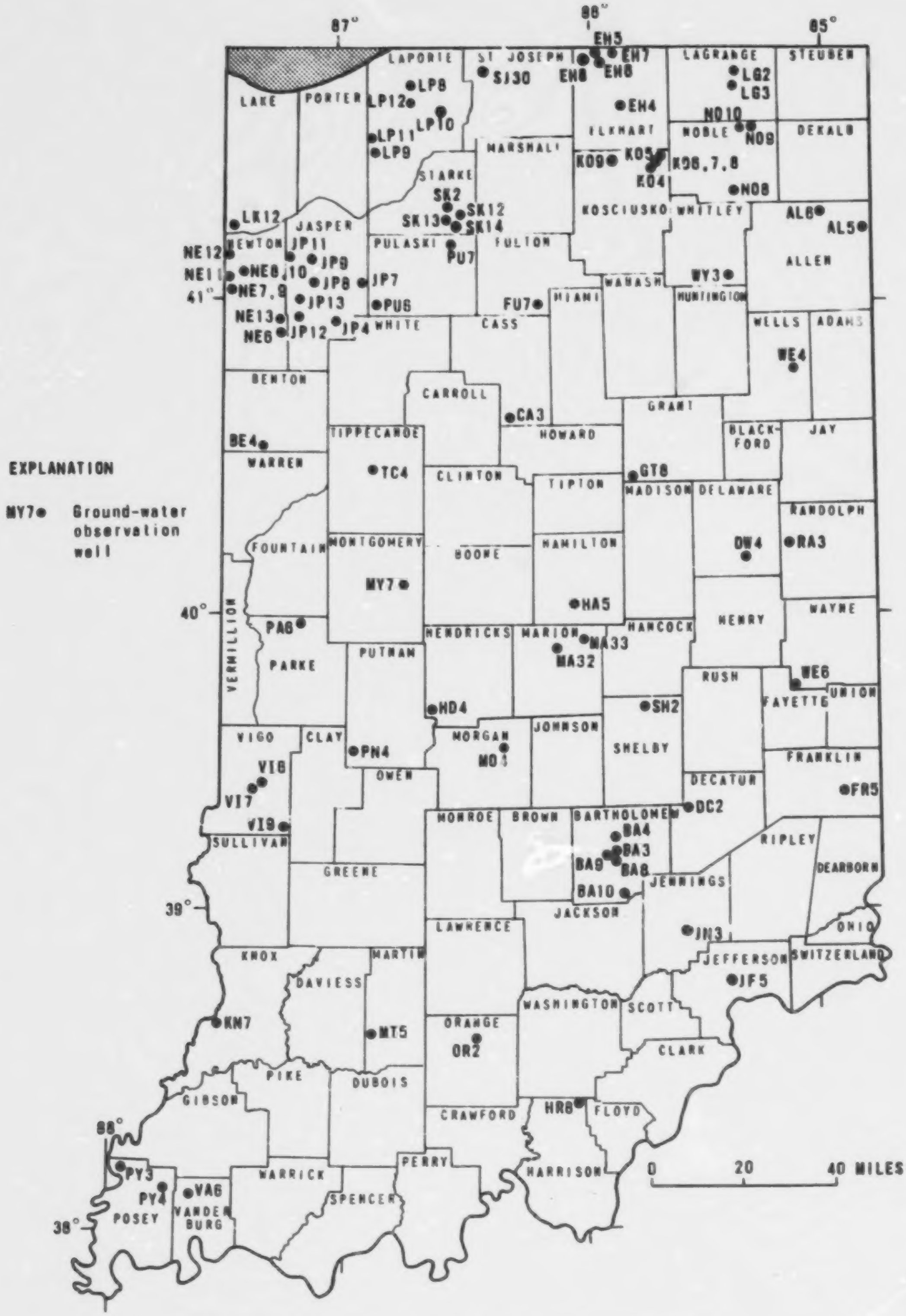
87°
86°
85°
41°
40°
39°
38°
88°
EXPLANATION
MY7● Ground-water observation well
LAKE
PORTER
LAPORTE
ST JOSEPH
ELKHART
LAGRANGE
STEUBEN
NOBLE
DEKALB
MARSHALL
STARKE
KOSCIUSKO
WHITLEY
ALLEN
JASPER
NEWTON
PULASKI
FULTON
WABASH
HUNTINGTON
MIAMI
CASS
WHITE
WELLS
ADAMS
BENTON
CARROLL
GRANT
HOWARD
TIPPECANOE
BLACKFORD
JAY
WARREN
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
VERMILLION
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
HENRY
WAYNE
RUSH
FAYETTE
UNION
VIGO
CLAY
MORGAN
JOHNSON
SHELBY
FRANKLIN
OWEN
DECATUR
SULLIVAN
GREENE
MONROE
BROWN
BARTHOLOMEW
RIPLEY
DEARBORN
JENNINGS
JACKSON
OHIO
LAWRENCE
KNOX
DAVIESS
MARTIN
JEFFERSON
SWITZERLAND
WASHINGTON
SCOTT
CLARK
ORANGE
PIKE
DUBOIS
GIBSON
CRAWFORD
FLOYD
HARRISON
PERRY
WARRICK
SPENCER
POSEY
VANDERBURG
EH5
EH7
EH6
EH8
EH4
SJ30
LP8
LP12
LP10
LP11
LP9
LG2
LG3
NO10
NO9
NO8
KO9
KO3
KO6,7,8
KO4
SK2
SK12
SK13
SK14
PU7
PU6
LK12
NE12
NE11
NE8
NE7,9
NE13
NE6
JP11
JP10
JP9
JP8
JP7
JP13
JP12
JP4
AL6
AL5
WY3
FU7
WE4
CA3
BE4
TC4
GT6
DW4
RA3
MY7
HA5
PA6
MA33
MA32
WE6
HD4
SH2
PN4
MO3
VI6
VI7
VI9
DC2
FR5
BA4
BA3
BA9
BA6
BA10
JN3
JF5
KN7
MT5
OR2
HR8
PY3
PY4
VA6
0
20
40 MILES

Figure 6.-- Location of ground-water observation wells.

ALLEN COUNTY

410426084495201. Local number, AL 5.

LOCATION.--Lat 41°04'26", long 84°49'52", in NW¼NE¼SE¼ sec.9, T.30 N., R.15 E., Allen County, Hydrologic Unit 04100005, 1.3 mi west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Limestone of Salina Formation of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in, depth 97 ft, cased to 40 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of floor of shelter 0.17 ft above land-surface datum.

REMARKS.--Water level affected by nearby quarry operations.

PERIOD OF RECORD.--July 1962 to December 1971. January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.77	28.90	28.82	28.65	28.47	28.14	28.52	27.95	27.83	27.82	27.84	27.70
10	28.63	28.98	28.88	28.12	28.38	28.21	28.07	28.27	28.06	27.90	27.69	27.82
15	28.53	29.11	28.77	28.23	28.27	28.31	28.09	27.87	27.94	27.83	27.90	28.14
20	28.69	28.90	28.48	28.91	28.44	27.98	28.15	27.97	28.02	27.83	27.82	27.94
25	29.15	29.21	28.50	28.31	28.26	28.63	28.02	27.91	27.93	27.81	27.95	28.55
EOM	28.82	28.82	28.81	28.33	28.28	28.79	27.91	27.65	27.84	27.73	27.76	28.57
LOW	29.32	29.38	29.37	28.91	28.72	28.85	28.52	28.55	28.45	28.52	28.26	28.94
HIGH	28.53	28.38	28.21	28.08	27.68	27.90	27.77	27.63	27.73	27.67	27.54	27.66

WTR YR 1983 HIGH 27.54 AUG 11 LOW 29.38 NOV 27

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

ALLEN COUNTY

410932084561101. Local number, AL 6.

LOCATION.--Lat 41°09'32", long 84°56'11", in SW¼SW¼NE¼ sec.10, T.31 N., R.14 E., Allen County, Hydrologic Unit 04100005, at the intersection of Ehle and Thimler Roads, 10 mi northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 84 ft, cased to 81.5 ft, screened to 83.5 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--December 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.33 ft below land-surface datum, May 3, 1983; lowest, 14.77 ft below land-surface datum, Oct. 29, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.17	12.31	9.35	9.56	10.33	10.65	9.20	8.52	10.43	11.22	12.59	13.90
10	13.19	12.19	9.46	9.90	10.37	10.75	8.98	9.33	10.35	11.34	12.80	14.02
15	13.21	12.14	9.86	10.29	10.57	10.88	8.55	9.79	10.61	11.65	12.92	14.18
20	13.26	11.99	9.52	10.48	10.51	10.87	9.19	10.11	10.83	11.91	13.16	14.20
25	13.35	11.34	9.12	10.68	10.43	11.06	9.73	9.94	11.15	12.19	13.55	14.24
EOM	13.34	10.58	8.93	10.74	10.52	10.03	9.87	10.14	11.25	12.45	13.75	14.27
LOW	13.55	13.42	10.66	10.92	10.89	11.17	10.23	10.30	11.42	12.73	13.87	14.42
HIGH	13.11	10.58	8.53	9.08	10.24	10.03	8.55	8.33	10.23	11.20	12.44	13.80

WTR YR 1983 HIGH 8.33 MAY 3 LOW 14.42 SEP 27

BARTHOLOMEW COUNTY

391320085534601. Local number, BA 3.

LOCATION.--Lat 39°13'20", long 85°53'46", in NE¼NE¼SE¼ sec.18, T.9 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, in northeast corner of Lincoln Park in the city of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 123 ft, cased to 116 ft, screened to 121 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 639.8 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

REMARKS.--Water level affected by pumpage for water and sewage utilities.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.75 ft below land-surface datum, Feb. 24, 25, 1975; lowest, 28.74 ft below land-surface datum, Oct. 9, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.31	20.51	---	---	---	19.84	19.80	17.96	18.72	19.33	20.66	20.66
10	20.14	20.37	---	---	---	19.88	19.22	18.28	19.19	19.40	21.04	20.83
15	20.34	20.14	---	---	---	19.83	19.21	18.00	19.72	20.22	20.76	20.65
20	20.22	20.37	---	20.05	---	19.70	19.48	18.65	19.26	20.28	21.09	20.69
25	20.11	20.21	---	19.56	19.98	19.81	19.27	18.00	19.59	20.52	21.08	20.52
EOM	20.12	---	---	---	---	19.89	---	18.66	---	20.56	20.75	---
LOW	20.90	20.99	20.52	20.52	20.10	20.44	20.43	19.55	20.27	21.28	21.88	21.64
HIGH	20.06	19.94	20.16	19.53	19.71	19.70	19.05	17.79	18.71	19.33	20.41	20.46

WTR YR 1983 HIGH 17.79 MAY 4 LOW 21.88 AUG 20

BARTHOLOMEW COUNTY

391627085534401. Local number, BA 4.

LOCATION.--Lat 39°16'27", long 85°53'44", in NE¼NE¼NE¼ sec.31, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, by a cemetery on the north side of Bakalar AFB at the northern city limits of Columbus.
Owner: Bartholomew County.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 93 ft, cased to 85 ft, screened to 90 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 654.04 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--January 1965 to current year.

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.25 ft below land-surface datum, Mar. 23, 1979; lowest, 21.15 ft below land-surface datum, Feb. 11, 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.91	19.41	19.76	19.42	18.78	18.76	18.99	17.42	15.54	16.30	17.19	18.03
10	18.98	19.50	19.76	19.20	18.74	18.80	18.98	16.26	15.67	16.43	17.34	18.17
15	19.07	19.57	19.75	19.05	18.71	18.83	18.87	15.79	15.76	16.56	17.49	18.30
20	19.16	19.63	19.76	18.94	18.72	18.87	18.67	15.60	15.89	16.71	17.63	18.41
25	19.25	19.69	19.75	18.88	18.75	18.94	18.28	15.51	16.03	16.85	17.76	18.53
EOM	19.34	19.73	19.66	18.82	18.75	18.96	17.97	15.47	16.16	17.04	17.91	18.65
LOW	19.35	19.74	19.78	19.64	18.81	18.96	18.99	17.87	16.18	17.06	17.93	18.66
HIGH	18.86	19.36	19.66	18.82	18.71	18.75	17.97	15.47	15.48	16.19	17.07	17.94

WTR YR 1983 HIGH 15.47 MAY 29-31 LOW 19.78 DEC 8, 9

BARTHOLOMEW COUNTY

390950085553501. Local number, BA 8.

LOCATION.--Lat 39°09'50", long 85°55'35", in NE¼NW¼SW¼ sec.1, T.8 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, on property of Meadows Metal Products Co., 4 mi south of Columbus.
Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 49 ft, casing length unknown.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 615.48 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft below land-surface datum, June 3, 1968; lowest, 23.17 ft below land-surface datum, Nov. 30, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.62	20.45	20.94	19.66	18.95	19.12	19.61	16.89	14.85	16.48	17.97	19.26
10	19.75	20.59	20.83	19.22	18.90	19.22	19.48	15.26	15.09	16.77	18.19	19.44
15	19.90	20.71	20.78	19.07	18.89	19.30	19.19	14.71	15.34	17.01	18.42	19.62
20	20.03	20.82	20.70	19.05	18.94	19.38	18.65	14.52	15.63	17.22	18.64	19.78
25	20.17	20.90	20.63	19.04	19.00	19.48	18.08	14.47	15.91	17.45	18.86	19.93
EOM	20.33	20.95	20.30	18.99	19.05	19.56	17.82	14.59	16.21	17.73	19.07	20.08
LOW	20.34	20.96	20.97	20.28	19.05	19.56	19.62	17.80	16.25	17.77	19.11	20.10
HIGH	19.50	20.35	20.30	18.97	18.89	19.06	17.82	14.45	14.67	16.27	17.78	19.12

WTR YR 1983 HIGH 14.45 MAY 22, 23 LOW 20.97 DEC 3, 4

BARTHOLOMEW COUNTY

391035085560401. Local number, BA 9.

LOCATION.--Lat 39°10'35", long 85°56'04", in SW¼NE¼SW¼ sec.35, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, at the Bartholomew County Home on the 4-H Fairgrounds, 3.0 mi south of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 115 ft, cased to 106 ft, screened to 111 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.58 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.65 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR IN-80-1: 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft below land-surface datum, Apr. 27-30, 1973; lowest, 38.75 ft below land-surface datum, Sept. 15, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.47	29.80	---	---	29.42	28.96	29.35	27.14	24.97	27.16	28.94	29.71
10	29.29	29.89	---	---	29.33	29.22	29.27	26.01	25.05	27.63	29.01	30.11
15	29.40	30.48	---	---	29.21	29.15	28.83	25.38	25.35	27.90	29.22	30.08
20	29.46	30.60	---	29.45	29.06	29.33	28.38	25.03	25.76	28.15	29.84	30.45
25	29.54	30.56	---	29.50	29.07	29.33	28.12	24.86	26.51	28.52	29.70	30.21
EOM	29.64	30.71	---	29.54	28.99	29.53	28.03	24.65	26.69	28.60	29.68	30.29
LOW	31.26	32.15	32.24	31.12	30.92	30.88	30.84	29.44	28.22	29.89	30.90	31.88
HIGH	29.29	29.76	30.74	29.41	28.99	28.96	28.03	24.46	24.62	26.74	28.39	29.59

WTR YR 1983 HIGH 24.46 MAY 29 LOW 32.24 DEC 3

BARTHOLOMEW COUNTY

390317085523701. Local number, BA 10.

LOCATION.--Lat 39°03'17", long 85°52'37", in NE¼NE¼NE¼ sec.16, T.7 N., R.6 E., Bartholomew County, Hydrologic Unit 05120207, 0.8 mi east of U.S. Highway 31A and 1.0 mi southeast of Jonesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 85 ft, cased to 80 ft, screened to 85 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 580 ft. Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft below land-surface datum, Apr. 14, 1979; lowest, 11.85 ft below land-surface datum, Nov. 12, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.19	11.57	11.04	7.08	8.15	9.27	9.53	2.26	7.35	8.90	9.92	10.62
10	11.24	11.58	10.87	7.64	8.31	9.37	7.87	5.21	7.72	9.04	10.07	10.77
15	11.26	11.65	10.85	8.19	8.58	9.54	4.70	5.30	8.05	9.27	10.27	10.86
20	11.35	11.71	10.63	8.59	8.83	9.57	5.93	6.15	8.32	9.41	10.38	10.95
25	11.41	11.46	10.54	8.32	9.00	9.58	6.85	6.51	8.57	9.61	10.48	11.10
EOM	11.47	---	6.09	8.59	---	9.62	---	7.09	---	9.82	10.54	---
LOW	11.60	11.85	11.39	8.69	9.20	9.81	9.78	7.22	8.87	9.86	10.61	11.30
HIGH	11.08	11.26	6.04	6.38	8.12	9.12	4.55	1.75	7.20	8.80	9.85	10.58

WTR YR 1983 HIGH 1.75 MAY 3 LOW 11.85 NOV 12

BENTON COUNTY

402851087213501. LOCAL NUMBER, BE 4.

LOCATION.--Lat 40°28'51", long 87°21'35", in SE¼NE¼SE¼ sec.31, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on north side of county road, 3.6 mi southeast of Boswell.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 310 ft, cased to 300 ft, screened to 305 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land surface is 710 ft. Measuring point: Top of floor of shelter 2.15 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.65 ft below land-surface datum May 7, 1982; lowest, 16.11 below land-surface datum, Feb. 13, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.84	14.31	14.25	13.73	13.13	12.93	12.79	11.61	11.29	11.98	12.89	13.73
10	13.79	14.43	14.44	13.37	13.05	12.94	12.51	11.53	11.47	12.18	13.02	---
15	13.93	14.54	14.27	13.36	13.04	13.01	12.35	11.23	11.57	12.29	13.21	---
20	14.06	14.46	14.17	13.44	13.05	12.83	12.21	11.24	11.70	12.40	13.30	14.24
25	14.32	14.66	13.99	13.21	13.03	13.11	12.00	11.21	11.86	12.50	13.56	14.52
EOM	14.24	14.43	13.94	13.17	13.05	12.16	11.79	11.17	11.79	12.71	13.58	14.65
LOW	14.37	14.71	14.67	13.95	13.21	13.15	12.96	11.84	11.92	12.77	13.65	14.68
HIGH	13.75	14.13	13.84	13.09	12.85	12.16	11.79	11.11	11.22	11.84	12.71	13.65

WTR YR 1983 HIGH 11.11 MAY 22 LOW 14.71 NOV 27

CASS COUNTY

403407086175701. Local number, CS 3.

LOCATION.--Lat 40°34'07", long 86°17'57", in NE¼NE¼SE¼ sec.33, T.25 N., R.2 E., Cass County, Hydrologic Unit 05120105, at intersection of State Highway 18 and County Road 400 East, 2.5 mi east of Young America.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic Limestone of Devonian-Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 130 ft, cased to 78 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 781.74 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.65 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft below land-surface datum, Feb. 2, 1968; lowest, 7.95 ft below land-surface datum, Feb. 11, 15, 16, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.15	6.15	5.28	5.18	5.52	5.44	5.34	4.78	5.22	5.81	6.17	6.83
10	6.12	6.13	5.49	5.09	5.48	5.42	5.14	4.94	5.39	5.89	6.29	6.95
15	6.13	6.14	5.35	5.23	5.44	5.56	4.95	4.93	5.62	6.11	6.27	7.10
20	6.13	6.05	5.24	5.42	5.57	5.33	5.06	5.10	5.67	6.07	6.35	7.07
25	6.24	6.11	4.90	5.39	5.34	5.56	5.07	5.10	5.93	6.13	6.60	7.29
EOM	6.18	5.93	5.06	5.48	5.32	5.47	4.91	5.10	5.75	6.15	6.74	7.43
LOW	6.39	6.24	6.04	5.57	5.65	5.73	5.49	5.35	6.07	6.28	6.81	7.56
HIGH	6.09	5.75	4.69	5.02	5.18	5.30	4.79	4.45	5.15	5.74	6.15	6.82

WTR YR 1983 HIGH 4.45 MAY 2 LOW 7.56 SEP 30

DECATUR COUNTY

392022085371801. Local number, DC 2.

LOCATION.--Lat 39°20'22", long 85°37'18", in SE¼NE¼SW¼ sec.3, T.10 N., R.8 E., Decatur County, Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West and 7.5 mi west of Greensburg.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 49 ft, cased to 12.5 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 840.8 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.02 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.16 ft below land-surface datum, Dec. 10, 1966; lowest, 9.25 ft below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.60	8.76	6.67	2.39	2.46	5.75	6.36	.87	4.66	6.70	7.64	8.05
10	8.61	8.77	6.56	3.69	3.80	6.01	1.52	1.59	5.16	6.86	7.83	8.25
15	8.63	8.70	6.69	4.35	4.28	6.28	.79	1.07	5.61	7.01	7.99	8.42
20	8.65	8.65	5.88	4.96	4.74	6.48	1.88	2.14	6.02	7.11	8.12	8.57
25	8.70	8.17	3.35	4.19	5.14	6.55	3.49	3.06	6.35	7.27	8.26	8.67
EOM	8.72	7.67	1.41	4.15	5.39	6.72	1.81	4.13	6.60	7.49	7.87	8.77
LOW	8.73	8.79	7.67	5.08	5.45	6.75	6.76	4.27	6.64	7.52	8.37	8.79
HIGH	8.57	7.67	.85	1.61	1.81	5.45	.55	.17	4.27	6.64	7.52	7.88

WTR YR 1983 HIGH .17 MAY 3 LOW 8.79 NOV 8-11, SEP 30.

DELAWARE COUNTY

400541085213701. Local number, DW 4.

LOCATION.--Lat 40°05'41", long 85°21'37", in SE¼NW¼SW¼ sec.9, T.19 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on property owned by Monroe Township Conservation Club, and 8.0 mi south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 91 ft, cased to 89 ft, screened to 91 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 1,005 ft. Measuring point: Top of floor of shelter 2.88 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 44.49 ft below land-surface datum, Aug. 1, 1979; lowest, 49.50 ft below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.65	48.67	48.31	48.00	48.29	48.57	48.42	46.57	48.23	48.20	48.68	48.95
10	48.66	48.67	48.30	48.18	48.34	48.58	48.04	47.19	48.31	48.34	48.74	48.96
15	48.65	48.72	48.44	48.29	48.42	48.61	47.60	47.58	48.37	48.46	48.77	48.98
20	48.65	48.69	48.33	48.41	48.48	48.60	47.72	47.84	47.87	48.51	48.81	48.99
25	48.66	48.59	48.23	48.42	48.51	48.54	47.94	48.01	48.04	48.56	48.87	48.99
EOM	48.65	48.39	47.71	48.48	48.53	48.55	47.95	48.13	47.98	48.64	48.90	49.00
LOW	48.67	48.72	48.45	48.48	48.53	48.64	48.55	48.15	48.42	48.65	48.91	49.00
HIGH	48.24	48.39	47.68	47.77	48.28	48.52	47.60	46.52	47.87	48.01	48.64	48.91

WTR YR 1983 HIGH 46.52 MAY 3-4 LOW 49.00 SEP 20, 28-30

ELKHART COUNTY

413121085481301. Local number, EH 4.

LOCATION.--Lat 41°31'21", long 85°48'13", in SW¼SE¼SW¼ sec.35, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, at the southwest corner of Goshen Municipal Airport.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 62 ft, cased to 58 ft, screened to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 818 ft. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.83 ft below land-surface datum, Mar. 23, 24, 1982; lowest, 16.18 ft below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.09	14.31	14.02	13.12	13.24	13.55	13.71	12.36	12.28	12.87	13.91	14.76
10	14.15	14.26	13.51	13.07	13.31	13.60	13.53	12.04	12.38	13.01	14.13	14.82
15	14.21	14.25	13.23	13.07	13.37	13.67	13.33	11.96	12.46	13.24	14.27	14.88
20	14.27	14.27	13.16	13.14	13.41	13.73	12.86	11.99	12.55	13.49	14.44	14.92
25	14.35	14.25	13.16	13.17	13.46	13.79	12.70	12.06	12.76	13.76	14.60	14.94
EOM	14.41	14.20	13.14	13.26	13.49	13.78	12.69	12.17	12.87	13.90	14.71	14.97
LOW	14.42	14.42	14.20	13.28	13.50	13.81	13.78	12.70	12.88	13.97	14.74	14.98
HIGH	14.05	14.20	13.13	13.06	13.17	13.50	12.69	11.96	12.20	12.85	13.90	14.72

WTR YR 1983 HIGH 11.96 MAY 14, 15, 19 LOW 14.98 SEP 30

ELKHART COUNTY

414419085544601. Local number, EH 5.

LOCATION.--Lat 41°44'19", long 85°54'46", in NW¼NE¼NE¼ sec.23, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the inlet to Heaton Lake, and 3.5 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 13 ft, cased to 11 ft, screened to 13 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft. Measuring point: Top of floor of shelter 2.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.37 ft below land-surface datum, Jun. 16, 1981; lowest, 5.57 ft below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.49	4.45	3.10	3.31	3.47	3.80	3.06	2.58	3.07	3.25	3.80	4.82
10	4.52	4.54	3.17	3.37	3.57	3.64	3.03	2.81	3.17	3.44	4.04	4.95
15	4.57	4.26	3.27	3.44	3.75	3.74	2.78	2.99	3.28	3.64	4.18	5.07
20	4.70	4.04	3.27	3.52	3.65	3.70	2.91	3.01	3.36	3.80	4.27	4.72
25	4.78	3.84	3.17	3.52	3.64	3.72	3.13	2.89	3.59	3.99	4.44	4.77
EOM	4.83	3.58	3.21	3.61	3.73	3.28	2.93	3.01	3.29	3.86	4.63	4.94
LOW	4.84	4.82	3.58	3.61	3.76	3.81	3.32	3.10	3.66	4.20	4.67	5.13
HIGH	4.35	3.58	3.10	3.23	3.45	3.28	2.78	2.52	3.01	3.18	3.77	4.67

WTR YR 1983 HIGH 2.52 MAY 3, 4 OTHERS LOW 5.13 SEP 18, 19

ELKHART COUNTY

414351085540401. Local number, EH 6.

LOCATION.--Lat 41°43'51", long 85°54'04", in NW¼NE¼SW¼ sec.24, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the southeast shore of Heaton Lake, and 4.0 mi east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 22 ft, cased to 20 ft, screened to 22 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.10 ft below land-surface datum, Jun. 16-19, 1981; lowest, 10.43 ft below land-surface datum, Nov. 10 to Dec. 3, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.48	---	8.41	7.76	8.46	8.69	7.75	6.67	6.95	7.70	8.63	9.20
10	9.53	---	7.89	7.78	8.49	8.66	7.50	6.63	7.13	7.81	8.79	9.20
15	9.60	---	7.83	7.97	8.57	8.67	7.14	6.63	7.29	8.07	8.92	9.19
20	---	9.52	7.83	8.11	8.62	8.71	7.00	6.76	7.43	8.34	9.06	9.19
25	---	9.26	7.91	8.30	8.61	8.73	7.06	6.80	7.64	8.53	9.17	9.18
EOM	---	8.93	7.80	8.41	8.63	8.17	7.13	6.85	7.72	8.65	9.19	9.18
LOW	9.62	9.59	8.91	8.43	8.65	8.74	8.17	7.13	7.76	8.90	9.20	9.22
HIGH	9.48	8.93	7.79	7.76	8.34	8.17	7.00	6.63	6.87	7.70	8.63	9.18

WTR YR 1983 HIGH 6.63 MAY 7 -15 LOW 9.62 OCT 16

ELKHART COUNTY

414514085505001. Local number, EH 7.

LOCATION.--Lat 41°45'14", long 85°50'50", in SW¼SE¼SW¼ sec.9, T.38 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on north side of County Road 2, 200 ft east of County Road 21, and 2.7 mi northwest of Bristol. Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 61 ft, cased to 56 ft, screened to 61 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 781 ft. Measuring point: Top of floor of shelter 3.70 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.72 ft below land-surface datum, Mar. 17, 1982; lowest, 11.61 ft below land-surface datum, Sept. 5, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	10.74	10.05	10.32	10.53	10.44	8.93	9.02	9.72	10.73	11.58
10	---	---	10.28	10.03	10.37	10.57	10.15	8.78	9.13	10.07	10.71	11.59
15	---	---	10.15	10.06	10.42	10.62	9.89	8.73	9.23	10.46	10.83	11.52
20	---	11.19	10.12	10.16	10.42	10.66	9.39	8.77	9.35	10.84	10.96	11.47
25	---	11.09	10.15	10.22	10.46	10.71	9.28	8.82	9.72	10.99	11.29	11.45
EOM	---	10.92	10.11	10.31	10.49	10.65	9.27	8.90	9.86	11.10	11.49	11.43
LOW	10.91	11.21	10.92	10.32	10.49	10.73	10.65	9.29	10.05	11.29	11.50	11.61
HIGH	10.88	10.92	10.11	10.03	10.27	10.49	9.27	8.72	8.94	9.70	10.63	11.43

WTR YR 1983 HIGH 8.72 MAY 14 LOW 11.61 SEP 5

ELKHART COUNTY

414446086002501. Local number, EH 8.

LOCATION.--Lat 41°44'46", long 86°00'25", in SW¼SE¼SW¼ sec.36, T.38 N., R.4 E., Elkhart County, Hydrologic Unit 04050001, 50 feet north of Bristol Street (C. R. 10), 400 feet west of intersection of Bristol Street (10), and Nappanee Street extension, in Elkhart. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 80 ft, cased to 70 ft, screened to 80 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 763.36 ft. National Geodetic Vertical Datum of 1929. Measuring point: "V" notch filed on top of well casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--March 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.98 ft below land-surface datum, May 7, 1983; lowest, 11.54 ft below land-surface datum, Sept. 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5						---	9.82	8.05	9.02	9.95	10.52	11.24
10						---	9.51	8.05	9.28	10.13	10.67	11.35
15						---	8.76	8.26	9.50	10.28	10.79	11.45
20						---	8.51	8.50	9.74	10.42	10.89	11.46
25						---	8.65	8.56	9.96	10.60	11.00	11.38
EOM						10.26	8.67	8.79	9.91	10.51	11.12	11.47
LOW						10.27	10.27	8.86	10.07	10.75	11.15	11.54
HIGH						10.26	8.50	7.98	8.86	9.89	10.52	11.15

WTR YR 1983 HIGH 7.98 MAY 7 LOW 11.54 SEP 19

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

FRANKLIN COUNTY

392416085004301. Local number, FR 5.

LOCATION.--Lat 39°24'16", long 85°00'43", in SE¼NE¼NW¼ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, adjacent to property of Franklin County Conservation Club, 1.0 mi south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 61 ft, cased to 57 ft, screened to 59 ft.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 621.79 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.70 ft above land-surface datum.

PERIOD OF RECORD.--March 1968 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.95 ft below land-surface datum, May 24, 1968; lowest, 27.32 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.82	26.19	25.85	24.43	24.77	25.96	25.92	20.31	25.03	25.68	26.55	26.82
10	26.86	26.02	25.95	25.08	25.10	26.05	25.09	21.18	25.41	25.95	26.61	26.84
15	26.89	26.06	26.15	25.45	25.34	26.13	24.44	21.98	25.70	26.17	26.59	26.88
20	26.46	26.05	25.72	25.76	25.55	26.27	24.78	23.31	25.59	26.27	26.65	26.91
25	26.17	25.66	25.75	25.14	25.76	26.06	24.99	24.13	25.77	26.37	26.70	26.92
EOM	25.90	25.56	24.05	25.30	25.87	26.17	25.07	24.55	25.66	26.49	26.77	26.77
LOW	26.89	26.29	26.16	25.84	25.88	26.28	26.20	24.95	25.92	26.50	26.78	26.92
HIGH	25.90	25.56	24.02	24.07	24.76	25.88	24.44	19.34	24.68	25.68	26.50	26.77

WTR YR 1983 HIGH 19.34 MAY 3 LOW 26.92 SEP 20-26

FULTON COUNTY

405829086175801. Local number, FU 7.

LOCATION.--Lat 40°58'29", long 86°17'58", in NW¼NW¼SW¼ sec.10, T.29 N., R.2 E., Fulton County, Hydrologic Unit 05120106, 2.5 mi northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 102 ft, cased to 96 ft, screened to 102 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 776.45 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft below land-surface datum, Apr. 23-27, 1973; lowest, 12.60 ft below land-surface datum, Feb. 7, 8, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.05	11.24	9.22	8.50	9.18	9.53	8.25	7.00	8.67	9.69	10.88	11.94
10	12.01	11.02	9.02	8.64	9.20	9.58	8.01	7.33	8.89	9.86	11.06	12.09
15	12.07	10.75	9.07	8.83	9.33	9.65	7.57	7.62	9.08	10.08	11.27	12.19
20	12.10	10.57	8.97	9.13	9.39	9.60	7.50	7.95	9.29	10.23	11.42	12.23
25	12.24	10.37	8.76	9.18	9.39	9.79	7.83	8.17	9.52	10.44	11.63	12.36
EOM	12.21	9.92	8.30	9.33	9.46	9.04	8.04	8.40	9.59	10.71	11.78	12.40
LOW	12.25	12.22	9.93	9.38	9.50	9.81	9.04	8.48	9.63	10.72	11.83	12.42
HIGH	12.00	9.92	8.26	8.32	9.12	9.04	7.43	6.99	8.48	9.61	10.71	11.83

WTR YR 1983 HIGH 6.99 MAY 4 LOW 12.42 SEP 30

GRANT COUNTY

402322085481901. Local number, GT 8.

LOCATION.--Lat 40°23'22", long 85°48'19", in NW¼SW¼NW¼ sec.1, T.22 N., R.6 E., Grant County, Hydrologic Unit 05120107, located on County Road 700 West right of way, and 1.0 mi northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 35 ft, cased to 20 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 880 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.18 ft below land-surface datum, Mar. 20, 21, 1982: lowest, 10.66 ft below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.81	8.21	5.25	3.26	3.15	3.67	2.22	1.88	3.68	4.66	6.31	8.32
10	7.78	8.24	4.84	3.46	3.42	3.83	1.99	3.00	3.80	4.85	6.63	8.71
15	7.82	8.36	4.84	3.58	3.58	3.97	1.74	3.30	3.91	5.19	6.80	8.96
20	7.86	8.23	4.05	4.04	3.29	3.82	2.51	3.63	4.14	5.35	7.23	9.17
25	8.08	8.19	2.61	4.01	3.28	3.30	3.11	2.94	4.30	5.68	7.65	9.40
EOM	8.16	7.20	2.62	4.08	3.50	3.26	2.54	3.26	4.46	6.02	7.99	9.53
LOW	8.47	8.44	7.20	4.15	4.11	4.07	3.55	3.85	4.77	6.37	8.54	9.76
HIGH	7.68	7.20	1.67	2.80	2.87	3.09	1.71	1.45	3.43	4.48	6.04	8.12

WTR YR 1983 HIGH 1.45 MAY 2 LOW 9.76 SEP 29

HAMILTON COUNTY

400000086023001. Local number, HA 5.

LOCATION.--Lat 40°00'00", long 86°02'30", in SW¼SW¼SE¼ sec.14, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on Gray Road, 1.2 mi west of State Highway 234, and 3.5 mi southwest of Noblesville.
Owner: Earlham College.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 100 ft, cased to 80 ft, screened to 85 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 755.47 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.76 ft above land-surface datum.

PERIOD OF RECORD.--July 1965 to September 1971, July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.00 ft below land-surface datum, Feb. 24, 25, 1982; lowest, 11.66 ft below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.92	10.95	10.32	9.50	9.84	10.26	9.89	9.09	9.80	10.38	10.79	11.09
10	10.92	10.98	10.24	9.65	9.91	10.26	9.67	9.24	9.91	10.44	10.88	11.15
15	10.93	10.92	10.27	9.80	10.01	10.32	9.42	9.43	10.03	10.52	10.93	11.21
20	10.95	10.94	10.23	9.95	10.09	10.25	9.37	9.59	10.14	10.57	10.98	11.25
25	10.96	10.80	9.91	9.98	10.15	10.09	9.57	9.55	10.23	10.62	11.02	11.27
EOM	10.98	10.61	9.32	10.07	10.20	10.09	9.60	9.71	10.32	10.73	11.05	11.29
LOW	10.98	10.98	10.61	10.08	10.21	10.35	10.10	9.73	10.34	10.74	11.06	11.29
HIGH	10.88	10.61	9.31	9.32	9.84	10.07	9.34	9.08	9.73	10.33	10.74	11.06

WTR YR 1983 HIGH 9.08 MAY 6 LOW 11.29 SEP 30

HARRISON COUNTY

382323086044501. Local number, HR 8.

LOCATION.--Lat 38°23'23", long 86°04'45", in NW¼NW¼NE¼ sec.33, T.1 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on Harrison County road right of way. 2.0 mi southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 93 ft, cased to 54 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 827 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.98 ft below land-surface datum, Apr. 2, 1979; lowest, 19.71 ft below land-surface datum, Nov. 5, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.92	15.27	3.70	3.71	3.40	7.22	8.46	1.61	5.08	8.92	12.29	14.73
10	14.10	15.60	4.21	4.36	4.00	6.12	2.70	3.35	5.97	9.55	12.75	15.11
15	14.04	15.91	3.74	5.14	4.41	6.76	2.27	1.54	6.72	10.16	13.18	15.43
20	14.26	15.73	3.47	6.21	5.12	7.64	3.83	2.03	7.20	10.74	13.59	15.76
25	14.55	9.68	2.65	3.82	5.83	8.11	4.93	2.56	7.61	11.24	14.00	16.08
EOM	14.94	4.12	2.58	3.89	6.45	8.74	3.12	4.29	8.26	11.85	14.38	16.37
LOW	15.16	16.14	5.28	6.28	6.53	8.80	8.85	4.55	8.41	11.96	14.45	16.41
HIGH	14.04	4.12	1.52	2.86	2.77	5.97	2.17	1.11	4.57	8.41	11.96	14.45

WTR YR 1983 HIGH 1.11 MAY 3 LOW 16.41 SEP 30

HENDRICKS COUNTY

394025086400801. Local number, HD 4.

LOCATION.--Lat 39°40'25", long 86°40'08", in NW¼NW¼NW¼ sec.8, T.14 N., R.2 W., Hendricks County, Hydrologic Unit 05120203, at the intersection of State Highway 75 and County Road 600 South on county right of way, and 1.0 mi south of Coatesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 85 ft, cased to 70 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 860 ft. Measuring point: Top of floor of shelter 1.92 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1966 to September 1971. November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.65 ft below land-surface datum, Jan. 30, 1976; lowest, 28.0 ft below land-surface datum, January 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.06	24.38	22.24	20.48	---	21.36	20.25	20.52	21.52	22.65	24.11	24.55
10	24.13	24.57	21.35	20.66	---	21.38	19.96	20.67	21.42	22.75	24.23	24.69
15	24.14	24.35	21.00	---	---	21.42	19.86	20.80	21.75	23.12	24.46	24.87
20	24.19	24.24	20.85	---	---	21.31	20.01	21.09	21.91	23.35	24.56	24.97
25	24.39	24.18	20.38	---	20.91	20.90	20.41	21.14	22.18	23.77	24.76	25.26
EOM	24.53	23.60	20.14	---	21.10	20.46	20.85	21.23	22.29	23.92	24.57	25.33
LOW	25.03	24.81	23.60	20.80	21.18	21.58	21.00	21.40	22.42	24.34	24.99	25.45
HIGH	23.99	23.60	20.03	20.20	20.84	20.46	19.85	20.46	21.35	22.34	23.90	24.48

WTR YR 1983 HIGH 19.85 APR 14 LOW 25.45 SEP 23

JASPER COUNTY

410249087011201. Local number, JP 4.

LOCATION.--Lat 41°02'49", long 87°01'12", in SW¼NE¼SW¼ sec.17, T.30 N., R.5 W., Jasper County, Hydrologic Unit 07120002, on property of William Gehring, Inc., 0.9 mi east of Newland.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in, depth 300 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 676.93 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 0.00 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--July 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft below land-surface datum, Apr. 9, 1962; lowest, 40.17 ft below land-surface datum, July 25, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.00	6.19	4.00	3.00	3.13	2.84	2.40	1.99	3.62	10.40	23.25	13.60
10	9.50	5.92	3.80	2.80	2.98	2.88	2.09	2.36	6.25	16.65	27.29	14.51
15	8.37	5.69	3.64	3.00	2.91	2.91	2.10	2.30	12.11	23.33	21.07	13.28
20	7.61	5.25	3.44	3.20	3.02	2.67	2.09	2.49	18.84	19.01	18.57	12.15
25	7.15	5.17	3.00	3.00	2.97	2.87	2.04	2.29	21.07	21.48	20.44	11.33
EOM	6.64	4.61	3.00	3.20	2.87	2.56	2.06	3.02	15.75	24.22	15.93	11.32
LOW	10.50	6.72	4.80	3.43	3.34	3.10	2.61	3.65	26.20	27.89	29.74	18.50
HIGH	6.64	4.58	3.00	2.00	2.00	2.48	1.87	1.79	3.03	10.36	15.02	11.12

WTR YR 1983 HIGH 1.79 MAY 7 LOW 29.74 AUG 10

JASPER COUNTY

410809087580801. Local number, JP 7.

LOCATION.--Lat 41°08'10", long 86°58'08", in SE¼SE¼NE¼ sec.15, T.31 N., R.5 W., Jasper County, Hydrologic Unit 07120002, in northwest corner of intersection of County Roads 850N and 400E, 4.0 mi south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Middle Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 130 ft, cased to 94 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 699.38 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.75 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year. (Semi-annual tape-down readings only September 1971 to May 1978).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft below land-surface datum, Apr. 3, 1982; lowest, 9.25 ft below land-surface datum, Oct. 11, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.16	8.17	7.22	7.43	7.47	7.16	7.20	6.92	6.96	7.35	7.84	8.03
10	8.01	8.06	7.52	7.06	7.34	7.23	6.92	7.10	7.17	7.41	7.75	8.27
15	7.[illegible]9	8.16	7.40	7.44	7.27	7.29	7.01	6.88	7.12	7.51	8.03	8.37
20	8.09	7.84	7.40	7.59	7.38	7.03	7.03	6.89	7.24	7.54	8.02	8.36
25	8.43	8.06	7.31	7.36	7.36	7.44	6.94	6.83	7.27	7.62	8.20	8.63
EOM	8.19	7.59	7.45	7.44	7.26	7.10	6.34	6.78	7.29	7.71	8.09	8.64
LOW	8.61	8.38	8.04	7.79	7.67	7.60	7.33	7.28	7.48	7.84	8.35	8.83
HIGH	7.98	7.44	7.00	7.06	6.77	6.90	6.69	6.58	6.89	7.25	7.71	8.03

WTR YR 1983 HIGH 6.58 MAY 1 LOW 8.83 SEP 24

JASPER COUNTY

410535087035801. Local number, JP 8.

LOCATION.--Lat 41°05'35", long 87°03'58", in NE¼NE¼SE¼ sec.35, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 1.7 miles north of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 12 in, depth 310 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 686 ft. Measuring point: Lower lip of 2 in tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--May 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.77 ft below land-surface datum, May 3, 4, 1983; lowest, 25.11 ft below land-surface datum, July 26, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.68	12.16	10.82	10.27	10.42	10.47	9.71	8.81	9.63	---	19.97	15.30
10	12.57	12.09	10.68	10.14	10.39	10.47	9.45	9.10	9.83	---	19.97	15.06
15	12.54	12.01	10.53	10.31	10.40	10.53	9.27	9.09	10.09	---	19.36	14.67
20	12.49	11.80	10.45	10.51	10.43	10.31	9.29	9.15	---	---	17.95	14.27
25	12.57	11.77	10.31	10.42	10.46	10.48	9.40	9.24	---	18.06	---	14.07
EOM	12.39	11.44	10.26	10.50	10.47	10.15	9.33	9.38	---	20.51	---	13.82
LOW	12.72	12.42	11.49	10.54	10.56	10.58	10.16	9.47	10.17	24.99	20.45	15.77
HIGH	12.39	11.44	10.13	10.14	10.22	10.15	9.24	8.77	9.47	18.06	17.94	13.82

WTR YR 1983 HIGH 8.77 MAY 3, 4 LOW 24.99 JUL 28-31

JASPER COUNTY

410713087063201. Local number, JP 9.

LOCATION.--Lat 41°07'13", long 87°06'32", in NE¼SW¼SE¼ sec.21, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 4.4 miles northwest of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Silurian Limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 18 in, depth 260 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 685 ft. Measuring point: Lower lip of 2 in tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--July 1978 to current year. Record prior to Oct. 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.18 ft below land-surface datum, Apr. 3, 1982; lowest, 30.25 ft below land-surface datum, July 28, Aug. 12, 13, 14, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.25	7.78	6.34	5.84	5.89	5.81	5.44	4.60	4.90	11.27	---	13.72
10	8.07	7.62	6.29	5.66	5.82	5.83	5.12	4.79	5.16	19.82	---	12.53
15	8.05	7.59	6.07	5.77	5.79	5.88	4.94	4.58	5.31	28.97	29.33	10.95
20	8.02	7.29	5.96	6.06	5.81	5.74	4.97	4.57	5.52	24.10	20.78	10.18
25	8.15	7.35	5.87	5.89	5.83	5.97	4.98	4.61	7.68	25.64	17.15	9.82
EOM	7.95	6.92	5.89	5.92	5.87	5.72	4.88	4.67	15.07	---	13.98	9.51
LOW	8.37	7.96	6.96	6.10	5.99	5.99	5.72	4.89	16.42	30.25	30.25	15.28
HIGH	7.95	6.92	5.70	5.66	5.59	5.67	4.88	4.46	4.75	11.14	13.98	9.51

WTR YR 1983 HIGH 4.46 MAY 22 LOW 30.25 JUL 28, AUG 12, 13, 14.

JASPER COUNTY

410322087163101. Local number, JP 11.

LOCATION.--Lat 41°03'22", long 87°16'31", in NW¼NW¼NW¼ sec.18, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on Prudential Life Insurance Company of America property, 3.2 mi north of State Highway 14, and 1.5 mi southwest of Fair Oaks.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in, depth 630 ft, cased to 63 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 680 ft. Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.04 ft above land-surface datum, Apr. 3, 1982; lowest, 48.29 ft below land-surface datum, Aug. 6, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.04	5.52	3.33	2.60	2.32	2.04	1.51	.82	.94	6.77	44.76	26.96
10	7.40	5.20	3.17	2.36	2.22	2.10	1.24	.94	1.14	22.72	44.92	24.49
15	6.91	5.04	2.99	2.53	2.16	2.12	1.15	.73	1.55	36.75	30.67	18.97
20	6.52	4.61	2.88	2.64	2.19	1.89	1.14	.72	1.78	34.03	25.68	14.03
25	6.30	4.51	2.75	2.48	2.16	2.10	1.19	.65	24.39	35.67	28.61	12.15
EOM	5.83	3.98	2.67	2.50	2.12	1.76	1.14	.72	9.84	36.23	28.25	10.89
LOW	8.61	5.84	4.06	2.74	2.54	2.26	1.76	1.20	29.16	46.75	48.29	41.28
HIGH	5.83	3.98	2.47	2.34	2.06	1.76	1.01	.51	.82	6.77	20.83	10.89

WTR YR 1983 HIGH .51 MAY 22 LOW 48.29 AUG 6

JASPER COUNTY

410145087130401. Local number, JP 12.

LOCATION.--Lat 41°01'45", long 87°13'04", in NW¼SW¼SW¼ sec.22, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, in Old Union Township school yard, 200 ft east of County Road 900 West, 750 ft north of State Highway 14, and in Parr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone/Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 103 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 695 ft. Measuring point: Top of well casing 2.7 ft above land surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.-- May 24, 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.08 ft below land-surface datum, May 22, 1983; lowest, 44.30 ft below land-surface datum, Aug. 7, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.69	20.10	17.96	16.50	16.06	15.55	15.17	14.42	14.36	20.38	43.15	38.19
10	22.75	19.77	17.77	16.16	15.87	15.57	14.83	14.49	14.54	27.91	43.74	38.19
15	22.03	19.50	17.43	16.31	15.77	15.61	14.75	14.27	14.86	34.01	---	35.53
20	21.47	19.12	17.08	16.33	15.81	15.34	14.66	14.25	14.97	36.24	39.22	31.44
25	21.13	19.00	16.83	16.12	15.71	15.54	14.60	14.24	19.66	38.11	38.59	29.11
EOM	20.47	18.48	16.69	16.12	15.66	15.27	14.48	14.19	21.50	41.22	36.99	27.39
LOW	24.82	20.57	18.61	16.79	16.20	15.82	15.37	14.66	23.11	42.42	44.30	38.19
HIGH	20.47	18.48	16.50	15.97	15.61	15.20	14.48	14.08	14.30	20.38	35.95	27.39

WTR YR 1983 HIGH 14.08 MAY 22 LOW 44.30 AUG 7

JASPER COUNTY

405902087141501. Local number, JP 13.

LOCATION.--Lat 40°59'02", long 87°14'15", in NW¼NW¼NW¼ sec.9, T.29 N., R.7 W., Jasper County, Hydrologic Unit 07120002, at southwest corner of North Newton school, and 4.6 mi northwest of Rensselaer.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 106 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 700 ft. Measuring point: Top of well casing 3.4 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.98 ft below land-surface datum, Apr. 3, 1982; lowest, 50.73 ft below land-surface datum, Aug. 12, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.83	29.14	26.44	24.92	24.10	23.46	23.16	22.45	22.13	28.02	48.94	47.40
10	32.60	28.63	26.32	24.46	23.93	23.47	22.86	22.47	22.32	32.15	50.21	47.71
15	31.65	28.32	25.94	24.61	23.80	23.48	22.86	22.24	22.36	36.97	49.80	45.34
20	31.04	27.76	25.66	24.52	23.82	23.22	22.74	22.19	22.59	40.64	48.93	42.46
25	30.53	27.60	25.35	24.28	23.70	23.47	22.59	22.09	24.57	43.50	47.35	40.10
EOM	29.70	26.99	25.19	24.21	23.60	23.17	22.43	22.01	28.31	47.23	45.64	38.18
LOW	35.26	29.76	27.13	25.27	24.26	23.68	23.31	22.62	28.38	47.38	50.73	47.02
HIGH	29.70	26.98	25.00	24.01	23.60	23.07	22.43	21.96	22.06	28.02	45.54	38.18

WTR YR 1983 HIGH 21.96 MAY 22 LOW 50.73 AUG 12

JEFFERSON COUNTY

384949085251901. Local number, JF 5.

LOCATION.--Lat 38°49'49", long 85°25'19", in SE¼NW¼SW¼ sec. 33, T.5 N., R.10 E., Jefferson County, Hydrologic Unit 05120207, on Jefferson Proving Ground, 500 ft north of Airfield Road, 1,000 ft southwest of the watertower and 2.2 mi west of main gate.
Owner: U.S. Army

AQUIFER.--Limestone, Dolomite, and Shale of Silurian and Ordovician Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 200 ft, cased to 33 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 855 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--This well was drilled on a mapped fracture trace.

PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.17 ft below land surface datum Dec. 28, 1982; lowest, 8.39 ft below land surface datum, Sept. 23, 24, 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.85	5.87	4.09	3.35	3.71	3.96	4.31	4.17	4.36	5.44	6.67	7.68
10	5.81	5.86	3.98	3.21	3.56	4.05	4.01	4.23	4.54	5.52	6.91	7.88
15	5.63	5.94	3.73	3.53	3.59	4.13	4.02	4.04	4.66	5.75	7.19	7.99
20	5.68	5.67	3.62	3.75	3.74	3.99	4.02	4.12	5.02	5.98	7.35	7.95
25	5.76	5.34	3.50	3.75	3.79	4.32	4.15	4.09	5.31	6.16	7.57	8.21
EOM	5.72	4.65	3.35	3.71	3.81	4.16	4.03	4.18	5.46	6.47	7.59	8.23
LOW	6.01	6.12	4.77	3.90	4.11	4.56	4.45	4.37	5.60	6.53	7.69	8.39
HIGH	5.63	4.61	3.17	3.21	3.27	3.84	3.84	3.96	4.24	5.41	6.47	7.65

WTR YR 1983 HIGH 3.17 DEC 28 LOW 8.39 SEP 23, 24, 30.

JENNINGS COUNTY

385601085365701. Local number, JN 3.

LOCATION.--Lat 38°56'01", long 85°36'57", in SE¼SW¼NE¼ sec.27, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, 200 ft west of State Highway 3, 1.6 mi south of Crosley Fish and Game Office and 3.0 mi south of Vernon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestones and dolomites of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 180 ft, cased to 45 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 718 ft. Measuring point: Top of floor of shelter 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.64 ft below land-surface datum, Jan. 21, 1979; lowest, 40.52 ft below land-surface datum, Sept. 18, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.05	38.82	37.95	38.21	38.43	38.53	38.57	---	38.37	38.90	39.52	39.38
10	38.61	38.83	38.20	38.15	38.36	38.58	---	---	38.67	39.11	39.51	39.53
15	38.52	38.77	38.15	38.38	38.44	38.64	---	---	38.86	39.30	39.66	39.50
20	38.75	38.56	38.01	38.60	38.57	38.42	---	38.15	38.92	39.38	39.62	39.45
25	38.88	38.34	38.00	38.21	38.56	38.70	---	38.29	39.03	39.38	39.68	39.65
EOM	38.78	38.10	38.04	38.38	38.57	38.54	---	38.39	38.90	39.49	39.39	39.61
LOW	39.11	38.94	38.49	38.78	38.85	38.88	38.69	38.48	39.14	39.58	39.72	39.78
HIGH	38.52	37.88	37.61	38.06	37.96	38.35	38.11	38.08	38.35	38.88	39.39	39.38

WTR YR 1983 HIGH 37.61 DEC 28 LOW 39.78 SEP 24

KNOX COUNTY

383247087361001. Local number, KN 7.

LOCATION.--Lat 38°32'47", long 87°36'10", in SE¼SE¼NW¼ sec.2, T.1 N., R.11 W., Knox County, Hydrologic Unit 05120113, in the right of way of Sixth Street Road, 9.8 mi south of Vincennes.
Owner: Michael J. Kelley.

AQUIFER.--Sand and Gravel Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 43 ft, cased to 16 ft, slotted to 19 ft, open end.
Instrumentation: Water-stage recorder. Prior to April 1968, handtaped monthly.

DATUM.--Altitude of land-surface datum is 405 ft. Measuring point: Top of floor of shelter 2.42 ft above land-surface datum.

PERIOD OF RECORD.--November 1956 to December 1972. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.57 ft below land-surface datum, May 3, 1983; lowest, 11.35 ft below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.22	10.36	4.76	4.91	8.33	9.64	8.62	3.04	6.47	8.19	9.77	10.43
10	10.03	10.39	6.40	6.28	8.56	9.41	7.30	3.72	7.83	8.68	9.92	10.51
15	10.05	10.40	7.99	8.07	9.10	9.61	5.82	2.91	8.27	9.01	10.04	10.48
20	10.17	10.42	8.35	8.76	9.38	9.49	7.72	4.80	8.48	9.27	10.15	10.58
25	10.27	10.36	4.29	8.78	9.57	9.23	8.33	6.64	8.77	9.46	10.26	10.63
EOM	10.34	9.65	4.00	9.07	9.65	8.87	6.13	7.69	7.47	9.64	10.36	10.67
LOW	10.35	10.43	9.65	9.10	9.66	9.76	8.87	7.85	8.93	9.65	10.38	10.68
HIGH	10.02	9.65	3.23	4.16	8.32	8.87	5.63	2.57	6.21	7.45	9.65	10.38

WTR YR 1983 HIGH 2.57 MAY 3 LOW 10.68 SEP 30

KOSCIUSKO COUNTY

411839085451601. Local number, KO 4.

LOCATION.--Lat 41°18'39", long 85°45'16", in NE¼SW¼SE¼ sec.18, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106, on the county right of way of Armstrong Road, and 2.0 mi east of Oswego.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 22 ft, cased to 20 ft, screened to 22 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 852 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.42 ft below land-surface datum, Mar. 24-26, 1982; lowest, 12.96 ft below land-surface datum. Dec. 19-24, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.15	11.81	11.45	10.96	11.61	11.93	11.66	10.56	11.14	11.67	12.20	12.48
10	12.17	11.76	11.12	11.02	11.64	11.95	11.30	10.42	11.28	11.82	12.26	12.48
15	12.19	11.79	11.06	11.15	11.71	11.99	11.00	10.48	11.40	11.86	12.34	12.48
20	12.22	11.87	11.03	11.33	11.76	12.03	10.81	10.71	11.51	12.02	12.39	12.40
25	12.25	11.83	11.11	11.44	11.83	12.09	10.81	10.86	11.68	12.08	12.45	12.38
EOM	12.31	11.72	11.00	11.56	11.87	11.98	10.95	11.00	11.76	12.16	12.48	12.36
LOW	12.31	12.21	11.69	11.56	11.87	12.10	11.94	11.00	11.76	12.16	12.48	12.48
HIGH	12.13	11.72	11.00	10.96	11.59	11.88	10.80	10.42	11.01	11.67	12.16	12.36

WTR YR 1983 HIGH 10.42 MAY 8-12 LOW 12.48 AUG 27 - SEP 16

KOSCIUSKO COUNTY

412500085384501. Local number, KO 5.

LOCATION.--Lat 41°25'00", long 85°38'45", in SE¼SW¼NW¼ sec.11, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, in the southeast corner of Wawasee Airport, and 3.5 mi east of Syracuse.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in, depth 13 ft, cased to 11 ft, screened to 13 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 2.70 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to November 4, 1982 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.94 ft below land-surface datum, Mar. 20, 21, 1982; lowest, 6.27 ft below land-surface datum, Nov. 20-23, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.86	---										
10	4.91	---										
15	4.97	---										
20	5.03	---										
25	5.08	---										
EOM	5.15	---										
LOW	5.15	5.15										
HIGH	4.78	4.49										

WTR YR 1983 HIGH 4.49 NOV 3, 4 LOW 5.15 OCT 30- Nov.1

KOSCIUSKO COUNTY

412554085450001. Local number, KO 6.

LOCATION.--Lat 41°25'54", long 85°45'00", in NW¼SW¼NW¼ sec.5, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, west end of North Shore Drive and Lakeview Park in Syracuse, Indiana.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 23 ft, cased to 20 ft, screened to 23 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.61 ft below land-surface datum, Apr. 19-21, 1982; lowest, 10.64 ft below land-surface datum, Feb. 9, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.21	9.33	8.98	8.86	9.15	9.36	9.08	8.28	8.10	---	8.90	9.34
10	9.28	9.36	8.97	8.87	9.17	9.34	8.98	8.26	---	8.70	9.01	9.43
15	9.36	9.35	8.96	8.95	9.24	9.39	8.81	8.23	---	8.78	9.06	9.55
20	9.47	9.33	8.94	9.08	9.23	9.40	8.75	8.28	---	8.85	9.16	9.59
25	9.58	9.28	8.94	9.09	9.25	9.47	8.62	8.29	---	8.92	9.08	9.65
EOM	9.62	9.18	8.87	9.12	9.32	9.34	8.59	8.12	---	8.87	9.21	9.69
LOW	9.62	9.62	9.18	9.12	9.33	9.48	9.34	8.59	8.23	9.04	9.23	9.70
HIGH	9.15	9.18	8.86	8.86	9.11	9.33	8.59	8.12	8.10	8.69	8.87	9.23

WTR YR 1983 HIGH 8.10 JUN 3 -7 LOW 9.70 SEP 30

KOSCIUSKO COUNTY

412510085442801. Local number, KO 7.

LOCATION.--Lat 41°25'10", long 85°44'28", in SE¼NE¼NW¼ sec.8, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 20 ft north of the intersection of Chicago Avenue and County Road 530 East in Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 23.8 ft, cased to 20.8 ft, screened to 23.8 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 2.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.86 ft below land-surface datum, Mar. 16, 1982; lowest, 5.63 ft below land-surface datum, Sept. 18, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.85	4.07	3.09	3.93	---	4.85	3.94	3.21	4.24	4.80	4.78	5.43
10	4.86	4.22	3.36	4.12	---	4.70	3.94	3.65	4.34	4.86	5.00	5.49
15	4.92	4.16	3.76	4.28	---	4.78	3.28	3.91	4.56	4.97	5.11	5.57
20	4.96	4.03	3.89	---	4.68	4.78	3.67	4.08	4.79	5.03	5.13	5.25
25	5.00	3.94	3.85	---	4.70	4.79	4.02	4.06	4.94	5.12	5.24	5.28
EOM	5.04	3.82	3.68	---	4.74	4.27	4.05	4.06	4.92	4.62	5.30	5.34
LOW	5.07	5.04	3.95	4.44	4.79	4.86	4.30	4.21	5.00	5.21	5.33	5.63
HIGH	4.78	3.82	3.08	3.74	4.67	4.27	3.28	3.11	4.10	4.62	4.63	5.22

WTR YR 1983 HIGH 3.08 DEC 6 LOW 5.63 SEP 18

KOSCIUSKO COUNTY

412404085442501. Local number, KO 8.

LOCATION.--Lat 41°24'04", long 85°44'25", in SE¼SE¼NW¼ sec.17, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, 0.5 mi south of County Road 1200 North on west side of State Highway 13, and 1.7 mi south of Syracuse.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 27.8 ft, cased to 24 ft, screened to 27 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 863 ft. Measuring point: Top of floor of shelter 2.80 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.90 ft below land-surface datum, Mar. 14, 1982; lowest, 6.30 ft below land-surface datum, Sept. 14-16, 18, 19, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.33	4.50	3.59	4.31	4.49	4.77	3.90	3.50	4.50	5.13	5.33	6.16
10	5.35	4.67	3.93	4.38	4.54	4.70	3.99	3.96	4.63	5.24	5.49	6.24
15	5.36	4.62	4.22	4.46	4.66	4.75	3.45	4.18	4.84	5.41	5.65	6.30
20	5.42	4.44	4.23	4.63	4.62	4.73	3.85	4.37	5.03	5.59	5.67	5.95
25	5.43	4.35	4.12	4.64	4.63	4.72	4.21	4.19	5.26	5.69	5.89	5.91
EOM	5.45	4.23	4.07	4.65	4.72	4.26	4.18	4.36	5.17	5.35	5.97	5.93
LOW	5.45	5.45	4.36	4.65	4.75	4.80	4.36	4.43	5.42	5.90	5.99	6.30
HIGH	5.22	4.23	3.59	4.13	4.47	4.26	3.45	3.33	4.37	5.04	5.32	5.88

WTR YR 1983 HIGH 3.33 MAY 2, 3 LOW 6.30 SEP 14-16, 18, 19

KOSCIUSKO COUNTY

412556085513401. Local number, KO 9.

LOCATION.--Lat 41°25'56", long 85°51'34", in SW¼NE¼NW¼ sec.5, T.34 N., R.6 E., Kosciusko County, Hydrologic Unit 04050001, on the north edge of property owned by the Dome Pipeline Corporation, on County Road 50 West, 1.5 miles northwest of Milford.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 4 in, depth 102 ft, cased to 99 ft, screened to 102 ft. Instrumentation: Water-stage recorder.

DATUM.--Datum is 830.90 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.2 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to September 1983.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.18 ft below land-surface datum, May 14, 1983; lowest 13.44 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	13.08	11.92	10.50	11.04	11.45	11.32	9.45	9.76	10.79	11.96	12.94
10	---	12.86	11.21	10.47	11.12	11.50	10.98	9.26	9.94	11.00	12.09	13.03
15	---	12.79	10.92	10.60	11.22	11.56	10.67	9.22	10.06	11.22	12.24	13.15
20	13.09	12.63	10.82	10.82	11.28	11.61	10.12	9.40	10.23	11.49	12.43	13.21
25	13.20	12.55	10.80	10.86	11.34	11.74	10.02	9.55	10.42	11.70	12.57	13.27
EOM	13.19	12.29	10.64	10.98	11.38	11.60	10.03	9.65	10.62	11.86	12.74	13.33
LOW	13.23	13.19	12.28	11.01	11.41	11.75	11.59	10.05	10.66	11.93	12.78	13.34
HIGH	13.07	12.29	10.64	10.45	10.95	11.39	10.01	9.18	9.68	10.65	11.87	12.78

WTR YR 1983 HIGH 9.18 MAY 14 LOW 13.34 SEP 30

LAGRANGE COUNTY

414318085200601. Local number, LG 2.

LOCATION.--Lat 41°43'18", long 85°20'06", in SW¼SE¼NE¼ sec. 26, T.38 N., R.10 E., Lagrange County, Hydrologic Unit 04050001, on northeast corner of intersection of State Highway 120 and County Road 475 East, and 1.2 mi west of Brighton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 86 ft, cased to 80 ft, screened to 86 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 911.02 ft. Measuring point: Top of floor of shelter 3.0 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.99 ft below land surface datum Apr. 3, 1982; lowest 15.45 ft below land surface datum, Feb. 12-16, 1981

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.16	14.45	14.35	13.57	13.50	13.75	13.90	13.09	12.59	13.16	14.16	15.10
10	14.21	14.50	14.03	13.49	13.56	13.79	13.79	12.88	12.64	13.35	14.41	15.13
15	14.25	14.53	13.82	13.47	13.60	13.84	13.70	12.75	12.68	13.61	14.55	15.11
20	14.29	14.55	13.72	13.47	13.62	13.87	13.46	12.66	12.79	13.86	14.72	15.11
25	14.37	14.58	13.66	13.45	13.66	13.95	13.32	12.60	13.13	14.05	14.91	15.13
EOM	14.42	14.50	13.63	13.49	13.70	13.95	13.23	12.56	13.16	14.24	15.05	15.16
LOW	14.43	14.59	14.50	13.62	13.70	13.98	13.96	13.24	13.27	14.34	15.06	15.17
HIGH	14.12	14.41	13.62	13.44	13.41	13.70	13.23	12.56	12.57	13.14	14.16	15.04

WTR YR 1983 HIGH 12.56 MAY 29 -31 LOW 15.17 SEP 9-10

LAGRANGE COUNTY

414158085253401. Local number, LG 3.

LOCATION.--Lat 41°41'58", long 85°25'34", in SE¼SE¼SE¼ sec.36, T.38 N., R.9 E., Lagrange County, Hydrologic Unit 04050001, at northwest corner of intersection of State Highway 9 and County Road 400 North, at edge of woods, and 1.4 mi south of Howe.
Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water table well, diameter 6 in, depth 40 ft, cased to 35 ft, screened to 40 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 3.7 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 21, 1982; lowest, 8.33 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.18	7.85	6.75	6.17	6.92	7.24	6.69	5.13	6.12	6.69	7.50	8.06
10	8.20	7.80	6.29	6.34	7.00	7.27	6.49	5.23	6.27	6.84	7.59	8.14
15	8.23	7.74	6.35	6.49	7.07	7.29	6.10	5.45	6.40	6.97	7.68	8.21
20	8.25	7.68	6.42	6.64	7.13	7.32	5.87	5.67	6.56	7.13	7.77	8.25
25	8.28	7.46	6.43	6.74	7.16	7.34	6.06	5.80	6.73	7.27	7.87	8.28
EOM	8.31	7.22	6.13	6.87	7.19	6.92	6.19	5.97	6.62	7.44	7.98	8.32
LOW	8.31	8.31	7.22	6.90	7.20	7.35	6.92	6.20	6.84	7.44	7.99	8.33
HIGH	8.12	7.22	6.13	6.11	6.84	6.92	5.87	5.13	6.00	6.62	7.44	8.00

WTR YR 1983 HIGH 5.13 MAY 5 LOW 8.33 SEP 30

LAKE COUNTY

411038087284701. Local number, LK 12.

LOCATION.--Lat 41°10'38", long 87°28'47", in SW¼NE¼SW¼ sec.32, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on the northern edge of Kankakee River State Park, 2.0 mi southwest of Schneider.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 82 ft, cased to 52 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 630.59 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.55 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping.

PERIOD OF RECORD.--March 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.15 ft below land-surface datum, Jan. 12, 1973; lowest, 14.35 ft below land-surface datum, Sept. 9, 1974.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.51	5.21	3.13	2.82	2.72	2.86	2.07	1.40	1.95	3.84	9.93	11.81
10	6.20	5.07	3.00	2.82	2.76	2.80	---	1.45	2.13	5.89	10.90	10.98
15	6.04	4.76	3.02	2.93	2.80	2.83	---	1.50	2.31	7.32	11.77	10.19
20	5.87	4.53	3.08	2.98	2.79	2.70	---	1.57	2.56	7.44	11.93	9.42
25	5.81	4.30	3.00	2.93	2.79	2.73	---	1.66	2.85	8.71	11.75	8.89
EOM	5.65	3.92	2.77	2.99	2.84	2.50	1.85	1.85	3.16	10.18	11.88	8.45
LOW	7.04	5.83	4.04	3.21	3.16	3.30	2.58	2.04	3.49	10.41	12.35	12.62
HIGH	5.65	3.92	2.75	2.75	2.67	2.50	1.85	1.34	1.90	3.22	9.93	8.45

WTR YR 1983 HIGH 1.34 MAY 7 LOW 12.62 SEP 3

LA PORTE COUNTY

413700086445401. Local number, LP 8.

LOCATION.--Lat 41°37'00", long 86°44'54", in NE¼SE¼NW¼ sec.34, T.37 N., R.3 W., La Porte County, Hydrologic Unit 07120001, at the west end of Soldiers Memorial Park in La Porte.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 3.0 in, depth 22 ft, cased to 20 ft, screened to 22 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 802.79 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.84 ft below land-surface datum May 24, 25, 1983; lowest, 7.04 ft below land-surface datum, Mar. 8-11, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	3.35	2.86	2.87	2.82	2.90	2.48	1.94	1.92	2.21	---	---
10	---	3.41	2.92	2.85	2.86	2.82	2.39	1.92	1.99	---	---	---
15	---	3.37	2.93	2.88	2.88	2.87	2.22	1.93	2.07	2.62	---	3.94
20	---	3.19	2.93	2.95	2.86	2.79	2.23	1.88	2.12	2.71	3.37	3.51
25	---	3.23	2.81	2.89	2.87	2.82	2.26	1.84	2.26	2.78	---	3.97
EOM	3.49	3.11	2.86	2.88	2.93	2.73	2.11	1.86	2.30	---	---	4.02
LOW	3.49	3.49	3.12	2.95	2.93	2.93	2.73	2.11	2.35	2.80	3.52	4.09
HIGH	3.48	3.08	2.72	2.79	2.72	2.70	2.11	1.84	1.87	2.19	3.30	3.51

WTR YR 1983 HIGH 1.84 MAY 24, 25 LOW 4.09 SEP 13

LA PORTE COUNTY

412350086512801. Local number, LP 9.

LOCATION.--Lat 41°23'50", long 86°51'28", in SE¼SW¼NE¼ sec.15, T.34 N., R.4 W., La Porte County, Hydrologic Unit 07120001, at the intersection of County Roads 1450 South and 825 West, 3.0 mi southeast of Wanatah.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 32 ft, cased to 27 ft, screened to 32 ft. Instrumentation: Water-stage recorder.

DATUM.--Datum is 706.81 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 1.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft below land-surface datum, Apr. 3, 1982; lowest, 8.01 ft below land-surface datum, Dec. 6, 7, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.23	7.39	4.62	4.85	5.21	5.76	3.85	2.37	3.89	2.32	4.80	6.16
10	7.29	7.38	4.37	5.00	5.23	5.80	3.55	3.00	4.15	3.22	5.09	6.32
15	7.35	7.10	4.66	5.31	5.35	5.88	2.75	3.29	4.37	3.71	5.40	6.48
20	7.40	6.96	4.90	5.49	5.53	5.78	3.28	2.79	4.67	3.01	5.54	6.59
25	7.47	6.68	4.67	5.56	5.62	5.79	3.63	3.14	4.93	3.91	5.79	6.71
EOM	7.53	6.32	4.62	5.20	5.68	5.01	2.47	3.58	5.13	4.39	5.99	6.80
LOW	7.53	7.54	6.31	5.62	5.70	5.91	5.01	3.71	5.16	5.20	6.03	6.81
HIGH	7.18	6.32	4.37	4.65	5.16	5.01	2.36	1.69	3.70	1.67	4.49	6.03

WTR YR 1983 HIGH 1.67 JUL 2 LOW 7.54 NOV 1

LA PORTE COUNTY

413139086341401. Local number, LP 10.

LOCATION.--Lat 41°31'40", long 86°34'10", in SE¼SW¼NE¼ sec. 31, T.36 N., R.1 W., La Porte County, Hydrologic Unit, 07120001, 200 ft north of the Mixsawbah Fish Hatchery Manager's residence and 2.6 mi southeast of Stillwell. Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 104 ft, cased to 102 ft, screened to 104 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 695 ft. Measuring point: Top of floor of shelter 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.95 ft below land surface datum, Mar 16, 1982; lowest 9.16 ft below land surface datum, Aug 13, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.58	7.88	4.35	6.94	7.05	7.45	5.06	4.39	6.75	7.49	8.06	8.75
10	8.52	7.83	5.36	7.10	7.15	7.41	5.22	5.22	7.01	7.72	8.24	8.84
15	8.54	7.66	6.36	7.40	7.23	7.51	4.16	5.91	7.18	7.89	8.36	8.93
20	8.52	7.51	6.71	7.56	7.32	7.33	5.29	5.85	7.40	7.93	8.39	8.96
25	8.51	7.17	6.27	7.52	7.37	7.28	5.98	6.09	7.60	8.06	8.52	8.97
EOM	8.50	6.75	6.51	7.56	7.38	6.20	5.01	6.50	7.73	7.89	8.64	9.02
LOW	8.59	8.50	6.97	7.59	7.57	7.55	6.35	6.64	7.76	8.21	8.67	9.03
HIGH	8.50	6.75	4.35	6.59	7.01	6.19	4.01	3.48	6.60	7.43	7.90	8.67

WTR YR 1983 HIGH 3.48 MAY 2 LOW 9.03 SEP 30

LA PORTE COUNTY

412839086533101. Local number, LP 11.

LOCATION.--Lat 41°28'39", long 86°53'31", in SW¼SW¼SW¼ sec.16, T.35 N., R.4 W., La Porte County, Hydrologic Unit, 07120001, in the northeast corner of intersection of U.S. Highway 421 and County Road 900 South. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 100 ft, cased to 95 ft, screened to 100 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft. Measuring point: Top of recorder shelf 4.1 ft above land-surface.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.52 ft below land-surface datum, July 2, 1983; lowest, 9.11 ft below land surface datum, Nov. 13, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.22	8.98	6.33	5.79	6.28	6.60	5.10	3.72	4.45	3.16	4.98	6.11
10	8.34	9.08	5.92	5.88	6.23	6.67	4.95	3.96	4.63	3.70	5.17	6.32
15	8.48	9.02	5.98	6.16	6.30	6.77	4.34	4.06	4.76	4.08	5.40	6.48
20	8.57	8.86	6.12	6.33	6.45	6.69	4.35	3.96	4.94	4.35	5.54	6.49
25	8.81	8.22	6.12	6.42	6.49	6.72	4.54	4.04	5.10	4.62	5.75	6.61
EOM	8.95	7.74	5.74	6.57	6.52	5.93	4.22	4.25	5.26	4.70	5.94	6.78
LOW	8.96	9.11	7.75	6.60	6.60	6.82	5.93	4.33	5.27	5.30	5.99	6.80
HIGH	8.09	7.74	5.71	5.70	6.21	5.93	4.22	3.60	4.33	2.52	4.74	5.99

WTR YR 1983 HIGH 2.52 JUL 2 LOW 9.11 NOV 13

LA PORTE COUNTY

413434086434701. Local number, LP 12.

LOCATION.--Lat 41°34'34", long 86°43'47", in NE¼NE¼NW¼ sec.14, T.36 N., R.3 W., La Porte County, Hydrologic Unit, 07120001, on County Road 150 West, at La Porte Municipal Airport, 1.6 mi south of La Porte. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 77 ft, cased to 71 ft, screened to 77 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft. Measuring point: Top of recorder shelf 3.70 ft above land-surface.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.59 ft below land-surface datum, May 29, 30, 31, 1983, lowest, 19.25 ft below land surface datum, Sept. 28, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.82	18.43	18.81	---	18.08	18.27	18.28	16.42	15.64	16.28	17.01	17.80
10	17.92	18.55	18.68	---	18.13	18.31	17.91	16.01	15.75	16.36	17.13	17.95
15	18.00	18.65	18.44	---	18.15	18.32	17.65	15.77	15.81	16.47	17.28	18.04
20	18.08	18.72	---	---	18.24	18.30	17.15	15.66	15.90	16.66	17.40	18.12
25	18.24	18.83	---	---	18.27	18.39	16.80	15.63	16.04	16.75	17.58	18.22
EOM	18.33	18.86	---	17.97	18.28	18.36	16.64	15.59	16.20	16.93	17.68	18.30
LOW	18.35	18.87	18.93	18.01	18.31	18.43	18.38	16.64	16.21	16.93	17.71	18.32
HIGH	17.74	18.35	18.44	17.90	17.86	18.26	16.64	15.59	15.60	16.21	16.93	17.71

WTR YR 1983 HIGH 15.59 MAY 29, 30, 31 LOW 18.93 DEC 7

MARION COUNTY

395218086082701. Local number, MA 32.

LOCATION.--Lat 39°52'18", long 86°08'27", in NE¼SW¼SW¼ sec.36, T.17 N., R.3 E., Marion County, Hydrologic Unit 05120201, at Indianapolis Water Company station on Westfield Boulevard in Broad Ripple, City of Indianapolis. Owner: Indianapolis Water Company.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in, depth 308 ft, cased to 60 ft, open end. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 719.78 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.15 ft above land-surface datum.

REMARKS.--Water level affected by earthquakes.

PERIOD OF RECORD.--May 1958 to August 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.85 ft below land-surface datum, June 17, 1958; lowest, 15.15 ft below land-surface datum, Oct. 5, 1965.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.86	10.44	---	9.41	9.49	9.94	9.53	8.45	9.68	11.23	11.28	11.59
10	10.71	10.46	---	9.50	9.56	9.86	9.38	8.94	10.53	11.05	11.50	11.61
15	10.43	10.41	9.99	9.64	9.66	9.83	9.13	9.99	11.19	11.60	11.39	10.98
20	10.47	10.38	9.96	9.70	9.74	9.82	9.30	9.28	10.82	11.35	11.37	11.60
25	10.50	10.29	9.38	9.68	9.80	9.77	9.51	9.25	11.30	11.40	11.56	10.64
EOM	10.47	---	9.13	9.75	9.80	9.79	9.47	9.52	11.12	11.43	11.55	11.36
LOW	11.86	10.65	10.05	9.80	9.93	10.70	9.99	10.26	11.98	12.39	12.07	12.25
HIGH	10.43	10.27	9.01	9.22	9.48	9.71	9.10	8.40	9.56	10.29	11.23	10.60

WTR YR 1983 HIGH 8.40 MAY 4 LOW 12.39 JUL 18

MARION COUNTY

395259086030101. Local number, MA 33.

LOCATION.--Lat 39°52'59", long 86°03'01", in NW¼NW¼NW¼ sec. 35, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, in the northwest corner of Skiles Test Elementary School property, 150 ft south of the intersection of Johnson Road and East 71st Street, 0.3 mi west of Shadeland Avenue, and 1.5 mi south of Castleton. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 94 ft, cased to 89 ft, screened to 94 ft. Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 812.20 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.90 ft above land-surface datum.

PERIOD OF RECORD.--May 12, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.75 ft below land-surface datum, Apr. 15, 1980; lowest, 75.18 ft below land-surface datum, Sept. 24, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.18	74.37	73.80	74.17	74.31	73.87	74.22	73.90	73.70	74.06	74.39	74.34
10	74.00	74.35	74.32	73.68	74.09	74.07	73.92	74.11	74.03	74.08	74.29	74.56
15	74.03	74.62	74.05	73.95	74.01	74.15	74.04	73.66	73.84	74.16	74.55	74.54
20	74.10	74.22	74.07	74.42	74.26	73.75	74.04	73.75	73.99	74.20	74.51	74.37
25	74.46	74.71	74.23	74.08	74.08	74.53	73.88	73.70	73.97	74.20	74.68	74.88
EOM	74.12	74.07	74.41	74.11	74.06	74.02	73.80	73.41	73.99	74.32	74.37	74.79
LOW	74.78	74.87	75.06	74.74	74.59	74.77	74.41	74.26	74.16	74.57	74.81	75.18
HIGH	73.98	73.73	73.80	73.68	73.27	73.73	73.35	73.37	73.52	73.96	74.20	74.34

WTR YR 1983 HIGH 73.27 FEB 2 LOW 75.18 SEP 24

MARTIN COUNTY

383659086545901. Local number, MT 5.

LOCATION.--Lat 38°36'59", long 86°54'59", in SE¼NE¼SW¼ sec.12, T.2 N., R.5 W., Martin County, Hydrologic Unit 05120208, on private property 0.25 mi southwest of Whitefield.
Owner: Joseph Arvin.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 143 ft, cased to 53 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 565 ft. Measuring point: Top of floor of shelter 1.0 ft above land-surface datum.

PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.91 ft below land-surface datum, Apr. 14, 1980; lowest, 34.10 ft below land-surface datum, Jan. 1, 5, 22, 23, 1960, and Dec 18, 19, 1964.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	27.99	27.37	27.52	26.89	26.05	26.13	25.75	25.25	25.31	25.71	26.06
10	27.55	27.97	27.87	26.95	26.64	26.25	25.94	26.00	25.50	25.38	25.66	26.34
15	27.51	28.19	27.55	27.22	26.64	26.22	26.04	25.53	25.31	25.42	25.91	26.39
20	27.70	27.86	27.50	27.34	26.68	25.73	26.03	25.67	25.34	25.49	25.94	26.35
25	28.08	28.28	27.46	27.13	26.48	26.44	25.84	25.50	25.26	25.44	26.16	26.96
EOM	27.81	27.75	27.71	27.03	26.45	26.07	25.69	25.19	25.20	25.59	26.02	26.91
LOW	28.26	28.45	28.48	27.79	27.18	26.67	26.32	26.10	25.63	25.78	26.25	27.13
HIGH	27.49	27.39	27.14	26.74	26.16	25.73	25.40	25.19	25.15	25.24	25.59	25.54

WTR YR 1983 HIGH 25.15 JUN 3 LOW 28.48 DEC 9

MONTGOMERY COUNTY

400247086482101. Local number, MY 7.

LOCATION.--Lat 40°02'47", long 86°48'21", in NE¼NW¼SW¼ sec.31, T.19 N., R.3 W., Montgomery County, Hydrologic Unit 05120110, on the county right of way at the intersection of State Highway 32 and County Road 525 East, and 4.5 mi east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 111 ft, cased to 107 ft, screened to 109 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 801 ft. Measuring point: Top of floor of shelter 2.38 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft below land-surface datum, Apr. 13, 1974; lowest, 32.06 ft below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.27	30.50	30.26	28.76	28.71	28.91	29.02	28.04	28.03	28.87	29.87	30.31
10	30.22	30.61	30.20	28.38	28.69	29.00	28.81	27.90	28.19	28.95	29.99	30.45
15	30.30	30.74	29.96	28.42	28.78	29.13	28.70	27.70	28.51	29.18	30.05	30.55
20	30.35	30.69	29.85	28.58	28.87	29.06	28.53	27.75	28.65	29.33	30.05	30.55
25	30.52	30.83	29.62	28.53	28.90	29.30	28.44	27.73	28.86	29.51	30.23	30.76
EOM	30.44	30.58	29.17	28.67	28.93	29.12	28.35	27.84	28.80	29.70	30.20	30.79
LOW	30.57	30.87	30.65	29.18	29.03	29.33	29.13	28.39	28.97	29.74	30.26	30.86
HIGH	30.19	30.36	29.17	28.36	28.44	28.89	28.35	27.68	27.89	28.82	29.74	30.22

WTR YR 1983 HIGH 27.68 MAY 23 LOW 30.87 NOV 25

MORGAN COUNTY

393423086161001. Local number, MG 4.

LOCATION.--Lat 39°34'23", long 86°16'10", in NW¼NW¼NW¼ sec.13, T.13 N., R.2 E., Morgan County, Hydrologic Unit 05120201, on east side of County Road 850 East, 0.4 mi north of County Road 950 North, and 1.1 mi north of Waverly.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 60 ft, cased to 56 ft, screened to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 645 ft from topographic map. Measuring point: Top of floor of shelter 2.90 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.09 ft below land surface datum, Apr. 9, 1982; lowest, 15.60 ft below land-surface datum, Feb. 9, 10, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.49	15.19	15.17	12.37	12.72	---	13.06	11.31	11.62	12.66	13.76	14.69
10	14.63	15.26	15.00	12.33	12.75	---	12.72	11.12	11.80	12.84	13.92	14.80
15	14.73	15.32	14.83	12.42	12.81	---	12.33	11.13	11.96	12.98	14.06	14.96
20	14.83	15.40	14.70	12.59	12.87	---	11.96	11.27	12.15	13.17	14.29	15.05
25	14.93	15.44	14.34	12.67	12.93	---	11.90	11.29	12.32	13.38	14.47	15.15
EOM	15.10	15.43	12.88	12.80	12.98	13.11	12.03	11.45	12.51	13.56	14.59	15.24
LOW	15.11	15.45	15.45	12.87	12.99	13.15	13.11	12.03	12.54	13.59	14.61	15.26
HIGH	14.49	15.11	12.88	12.33	12.71	12.99	11.89	11.12	11.49	12.54	13.60	14.61

WTR YR 1983 HIGH 11.12 MAY 10 LOW 15.45 NOV 26

NEWTON COUNTY

405105087173301. Local number, NE 6.

LOCATION.--Lat 40°51'05", long 87°17'33", in SE¼SW¼SE¼ sec.23, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the right of way of County Road 1000 South, 1.0 mi south of Foresman.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 80 ft, cased to 76 ft, screened to 78 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 654.10 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.15 ft above land-surface datum.

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land-surface datum, Mar. 20, 21, 1982; lowest, 16.43 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.17	14.70	10.98	10.67	11.21	11.41	9.35	8.83	10.94	12.38	14.45	15.43
10	15.18	14.40	10.56	10.84	11.23	11.48	9.18	9.45	11.27	12.59	14.69	15.72
15	15.22	14.15	10.80	11.17	11.38	11.52	9.19	9.90	11.59	13.01	14.84	15.99
20	15.25	13.91	10.87	11.48	11.36	11.22	9.39	10.00	12.00	13.27	14.98	16.17
25	15.38	13.49	10.81	11.53	11.28	11.06	10.01	10.14	12.26	13.78	15.14	16.26
EOM	15.39	12.68	10.39	11.71	11.32	10.25	10.29	10.48	12.36	14.07	15.23	16.39
LOW	15.44	15.42	12.69	11.74	11.74	11.73	10.47	10.61	12.53	14.15	15.29	16.43
HIGH	15.09	12.68	10.27	10.41	11.14	10.25	9.16	8.81	10.61	12.33	14.15	15.29

WTR YR 1983 HIGH 8.81 MAY 4 LOW 16.43 SEP 30

NEWTON COUNTY

405959087282901. Local number, NE 7.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 136 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 680.83 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.03 ft above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.65 ft below land-surface datum, Apr 14, 1980; lowest, 70.13 ft below land-surface datum, Aug. 11, 12, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.65	46.51	43.04	41.29	39.88	38.86	38.02	37.21	36.68	38.06	58.17	59.59
10	50.57	45.85	42.87	40.87	39.67	38.80	37.77	37.25	36.72	38.88	60.11	59.90
15	49.64	45.37	42.48	40.85	39.48	38.67	37.73	37.03	36.67	41.86	62.08	60.82
20	48.84	44.68	42.18	40.66	39.42	38.31	37.66	36.92	36.74	46.03	62.55	60.73
25	48.12	44.36	41.81	40.37	39.26	38.43	37.50	36.82	36.83	50.38	61.58	59.21
EOM	47.17	43.68	41.57	40.14	39.09	38.12	37.32	36.67	37.49	55.71	60.49	57.65
LOW	52.66	47.18	43.76	41.62	40.17	39.15	38.13	37.39	37.64	56.48	62.71	61.28
HIGH	47.17	43.68	41.50	40.04	39.09	38.09	37.32	36.67	36.65	37.64	56.52	57.65

WTR YR 1983 HIGH 36.65 JUN 4 LOW 62.71 AUG 19

NEWTON COUNTY

410428087231501. Local number, NE 8.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼ sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 97 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 663.34 ft National Geodetic Vertical Datum. Measuring point: Top of floor of shelter 2.83 ft above land-surface datum.

REMARKS.--Water level may be affected by irrigation pumpage.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land-surface datum, May 31, 1976; lowest, 73.86 ft below land-surface datum, Aug. 9, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.95	19.09	14.93	12.52	10.63	9.28	7.97	---	6.09	11.99	65.02	43.89
10	24.31	18.30	14.68	12.03	10.43	9.11	7.65	---	6.06	31.49	66.73	48.88
15	23.08	17.66	14.19	11.93	10.11	8.90	7.56	---	10.72	51.82	54.81	57.15
20	22.00	16.90	13.77	11.66	9.95	8.52	7.44	6.51	8.73	58.37	48.76	42.35
25	21.07	16.42	13.32	11.28	9.74	8.56	7.23	6.36	17.13	58.40	47.56	37.67
EOM	19.90	15.68	12.93	10.94	9.54	8.17	---	6.13	14.46	54.48	40.29	34.58
LOW	27.66	19.91	15.74	12.98	10.97	9.57	8.17	6.71	21.51	71.87	73.86	58.71
HIGH	19.90	15.68	12.93	10.91	9.54	8.17	7.10	6.13	6.03	11.99	40.29	34.58

WTR YR 1983 HIGH 6.03 JUN 7 LOW 73.86 AUG 9

NEWTON COUNTY

405959087282902. Local number, NE 9.

LOCATION.--Lat 40°59'59", long 87°28'29", in SE¼SW¼SE¼ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 45 ft, cased to 42 ft, screened to 45 ft.

DATUM.--Altitude of land-surface datum is 681 ft from topographic map. Measuring point: top of "Y" in well casing 3.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.07 ft below land-surface datum, May 3, 1978; lowest, 14.01 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.02	13.01	11.06	10.53	10.56	10.76	9.44	8.06	8.65	10.59	12.64	13.47
10	13.14	12.85	10.73	10.58	10.47	10.70	9.09	8.19	9.01	10.98	12.86	13.60
15	13.20	12.74	10.67	10.69	10.49	10.67	8.86	8.18	9.36	11.36	12.99	13.72
20	13.28	12.57	10.60	10.79	10.48	10.39	8.94	8.09	9.59	11.67	13.08	13.81
25	13.36	12.37	10.58	10.89	10.50	10.37	9.16	8.17	10.08	12.03	13.17	13.89
EOM	13.43	12.10	10.45	10.90	10.66	10.09	8.76	8.38	10.31	12.34	13.37	13.99
LOW	13.44	13.43	12.10	10.90	10.90	10.77	10.08	8.76	10.31	12.38	13.38	14.01
HIGH	12.90	12.10	10.45	10.45	10.47	10.09	8.76	8.05	8.48	10.31	12.38	13.38

WTR YR 1983 HIGH 8.05 MAY 4, 22 LOW 14.01 SEP 30

NEWTON COUNTY

410428087231502. Local number, NE 10.

LOCATION.--Lat 41°04'28", long 87°25'44", in NW¼SW¼SW¼, sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 41 ft, screened to 44 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 663 ft from topographic map. Measuring point: Top of floor of shelter 2.65 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.03 ft below land-surface datum Mar. 16, 1982; lowest, 6.08 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.81	5.07	3.02	3.86	3.99	4.74	3.24	1.58	3.13	4.66	5.58	5.86
10	5.80	5.01	3.06	3.96	4.11	4.75	2.92	2.25	3.53	4.85	5.70	5.88
15	5.76	4.92	3.45	4.17	4.35	4.75	2.54	2.23	3.88	5.06	5.77	5.95
20	5.76	4.91	3.60	4.30	4.42	4.41	2.88	1.94	4.10	5.18	5.67	6.01
25	5.78	4.73	3.45	4.39	4.51	4.29	3.34	2.55	4.39	5.32	5.67	6.03
EOM	5.81	4.49	3.47	4.49	4.58	4.01	2.71	2.86	4.55	5.51	5.76	6.07
LOW	5.82	5.81	4.48	4.49	4.63	4.81	4.01	2.90	4.56	5.52	5.83	6.08
HIGH	5.76	4.49	3.00	3.55	3.99	4.01	2.51	1.37	2.90	4.55	5.52	5.77

WTR YR 1983 HIGH 1.37 MAY 3 LOW 6.08 SEP 30

NEWTON COUNTY

410235087305901. Local number, NE 11.

LOCATION.--Lat 41°02'35", long 87°30'59", in SW¼SW¼SE¼, sec.13, T.30 N., R.10 W., Newton County, Hydrologic Unit 07120001, on right of way of County Road 300 North, 0.5 mi west of County Road 600 West, and 4.0 mi norhtwest of Enos.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth of 150 ft, cased to 90 ft, open end. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft from topographic map. Measuring point: Top of casing 3.30 ft above land surface.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.78 ft below land-surface datum, May 6, 1982; lowest, 63.69 ft below land-surface datum, Sept. 4, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.24	---	30.70	28.75	27.15	25.92	25.10	24.28	23.67	24.46	48.39	58.13
10	38.94	---	30.56	28.16	26.87	25.87	24.79	24.28	23.65	25.04	---	51.79
15	37.82	---	30.13	28.27	26.63	25.74	24.41	24.03	23.65	35.77	53.50	---
20	36.92	32.51	29.79	28.04	26.61	25.33	---	23.95	23.66	40.11	54.32	---
25	36.25	32.20	29.37	27.67	26.39	25.55	---	23.79	23.64	51.44	50.69	---
EOM	---	31.41	29.08	27.42	26.17	25.13	24.30	23.63	23.98	---	55.02	---
LOW	41.58	32.74	31.59	29.23	27.50	26.27	25.30	24.50	24.13	54.67	56.15	63.69
HIGH	35.70	31.41	28.94	27.26	26.17	25.05	24.30	23.63	23.62	24.07	47.12	50.10

WTR YR 1983 HIGH 23.62 JUN 4 LOW 63.69 SEP 4

NEWTON COUNTY

410830087305601. Local number, NE 12.

LOCATION.--Lat 41°08'17", long 87°30'56", in SW¼SW¼NE¼ sec.13, T.31 N., R.10 W., Newton County, Hydrologic Unit 07120001, along ditch on the east side of County Road 650 West, 130 feet north of County Road 950 North, 1.0 mi south of State Highway 10, and 3.5 miles west of Lake Village.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 150 ft, cased to 64 ft, open end. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft from topographic map. Measuring point: Top of casing 3.30 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--Oct. 16, 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.25 ft above land-surface datum, Apr. 16, 17, 1982; lowest, -12.66 ft above land-surface datum, Aug. 21, 22, 1982.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.08	5.78	3.59	2.31	1.80	1.49	.99	.28	.11	1.06	---	11.59
10	7.55	5.46	3.31	2.15	1.72	1.45	.81	.24	.19	1.79	8.81	11.62
15	7.15	5.11	3.05	2.13	1.67	1.44	.68	.14	.31	2.89	9.64	10.79
20	6.80	4.74	2.84	2.12	1.63	1.31	.62	.10	.42	3.81	11.40	9.97
25	6.55	4.47	2.62	2.02	1.58	1.34	.58	.11	.58	4.97	10.70	9.40
EOM	6.18	4.09	2.44	1.96	1.56	1.20	.39	.09	.73	7.23	10.29	8.89
LOW	8.55	6.18	4.09	2.44	1.97	1.56	1.20	.42	.77	7.61	11.62	12.31
HIGH	6.18	4.09	2.44	1.93	1.56	1.20	.39	.07	.10	.77	8.78	8.89

WTR YR 1983 HIGH .07 MAY 22 LOW 12.31 SEP 6

NEWTON COUNTY

405853087172401. Local number, NE 13.

LOCATION.--Lat 40°58'53", long 87°17'24", in SW¼NE¼NW¼ sec.12, T.29 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the Richard Smart property, 60 ft east of County Road 525 East, 900 ft south of County Road 100 South, and 2.0 mi north of Mount Ayr.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 130 ft, cased to 71 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 676 ft. Measuring point: Top of casing 3.9 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.39 ft above land-surface datum, May 6, 1982; lowest, -28.26 ft above land-surface datum, Aug. 12, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.13	7.51	4.77	3.37	2.53	1.98	1.65	1.00	.76	6.61	26.54	24.92
10	10.93	6.97	4.66	2.90	2.37	2.02	1.37	1.03	.97	10.43	27.72	24.97
15	9.99	6.70	4.34	3.13	2.23	2.02	1.39	.83	1.00	15.20	27.28	22.86
20	9.27	6.19	4.10	2.97	2.29	1.73	1.29	.76	1.24	18.85	26.50	20.26
25	8.78	6.01	3.77	2.76	2.22	2.00	1.14	.68	2.88	21.55	24.90	18.11
EOM	8.00	5.39	3.59	2.69	2.06	1.67	1.00	.62	6.91	24.88	23.13	16.36
LOW	13.53	8.10	5.58	3.71	2.76	2.25	1.83	1.22	6.99	25.07	28.26	25.49
HIGH	8.00	5.35	3.37	2.44	2.06	1.56	1.00	.51	.67	6.61	23.07	16.36

WTR YR 1983 HIGH .51 MAY 22 LOW 28.26 AUG 12

NOBLE COUNTY

411922085221801. Local number, NO 8.

LOCATION.--Lat 41°19'22", long 85°22'18", in SE¼SW¼SE¼ sec.9, T.33 N., R.10 E., Noble County, Hydrologic Unit 04050001, near the east edge of Chain O' Lakes State Park, and 5.0 mi south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 149 ft, cased to 146 ft, screened to 148 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 928 ft. Measuring point: Top of floor of shelter 2.65 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.55 ft below land-surface datum, May 31, 1982; lowest, 32.49 ft below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.56	29.70	29.39	29.55	---	29.38	29.56	29.02	28.79	29.01	29.32	29.46
10	29.46	29.69	29.59	29.25	---	29.47	29.28	29.19	28.96	29.06	29.21	29.59
15	29.42	29.89	29.49	29.33	---	29.50	29.27	28.78	28.87	29.08	29.47	29.63
20	29.49	29.67	29.47	---	---	29.30	29.28	28.79	28.95	29.16	29.44	29.54
25	29.73	29.92	29.51	---	29.56	29.73	29.15	28.77	28.94	29.22	29.55	29.84
EOM	29.63	29.65	29.61	---	29.45	29.45	29.05	28.61	28.91	29.20	29.47	29.82
LOW	29.89	30.01	30.08	29.78	29.74	29.86	29.68	29.28	29.08	29.37	29.66	30.02
HIGH	29.38	29.28	29.21	29.17	29.45	29.21	29.05	28.56	28.69	28.92	29.14	29.44

WTR YR 1983 HIGH 28.56 MAY 22 LOW 30.08 DEC 9

NOBLE COUNTY

413106085232701. Local number, NO 9.

LOCATION.--Lat 41°31'06", long 85°23'27", in NW¼NE¼SE¼ sec.5, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, at the intersection of County Roads 175 East and 1150 North, and 2.0 mi west of Wolcottville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 44 ft, cased to 39 ft, screened to 42 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 930 ft. Measuring point: Top of floor of shelter 2.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.53 ft below land-surface datum, Mar. 20, 1982; lowest, 17.55 ft below land-surface datum, Dec. 27, 28, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.28	13.58	10.61	10.80	---	12.60	10.79	9.23	11.58	12.06	14.09	15.41
10	15.34	13.82	10.48	---	---	12.24	10.48	10.13	11.73	12.53	14.30	15.62
15	15.38	13.71	11.12	---	---	12.27	9.90	10.67	12.07	12.91	14.56	15.82
20	15.46	13.29	10.82	---	---	12.38	10.12	11.09	12.51	13.29	14.77	15.92
25	15.64	12.64	10.42	---	12.30	12.50	10.72	11.03	12.81	13.61	15.03	16.05
EOM	15.73	11.97	10.15	---	12.40	11.10	10.82	11.30	11.92	13.84	15.20	16.16
LOW	15.74	15.71	12.00	10.80	12.52	12.64	11.18	11.39	12.99	13.94	15.29	16.18
HIGH	15.14	11.97	9.67	10.28	12.24	11.10	9.90	9.06	11.40	11.92	13.84	15.29

WTR YR 1983 HIGH 9.06 MAY 3 LOW 16.18 SEP 29, 30

NOBLE COUNTY

412948085223401. Local number, NO 10.

LOCATION.--Lat 41°29'48", long 85°22'34", in SW¼SW¼SE¼ sec.9, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, on the east side of West Lakes Marina in Rome City.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in, depth 24 ft, cased to 21 ft, screened to 24 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 920 ft. Measuring point: Top of floor of shelter 3.0 ft above land-surface datum.

PERIOD OF RECORD.--Nov. 2, 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.60 ft below land-surface datum, June 16, 1981; lowest, 12.74 ft below land-surface datum, Dec. 29, 1978, Feb 17, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.66	5.97	7.46	8.47	9.94	9.77	8.80	4.94	6.11	5.95	6.37	6.69
10	6.67	6.27	7.21	9.11	9.87	9.80	7.71	5.48	6.15	6.08	6.44	6.74
15	6.73	6.50	7.66	9.50	9.90	10.06	6.49	5.72	6.17	6.21	6.51	6.80
20	6.79	7.00	8.02	9.77	9.90	10.22	6.07	5.95	6.19	6.24	6.52	6.63
25	6.87	7.34	8.28	9.87	9.69	10.39	6.18	5.92	6.23	6.31	6.58	6.75
EOM	6.86	7.57	8.08	9.98	9.68	9.83	6.06	6.01	5.82	6.31	6.62	6.80
LOW	6.91	7.59	8.31	9.98	9.99	10.40	9.83	6.04	6.28	6.51	6.63	6.84
HIGH	6.56	5.97	7.21	8.08	9.68	9.69	6.06	4.94	5.82	5.83	6.30	6.62

WTR YR 1983 HIGH 4.94 MAY 5 LOW 10.40 MAR 24, 25

ORANGE COUNTY

383702086215601. Local number, OR 2.

LOCATION.--Lat 38°37'02", long 86°21'56", in NE¼SE¼SE¼ sec.11, T.2 N., R.1 E., Orange County, Hydrologic Unit 05120208, on property of Paul Middletown Farm, 6.6 miles southeast of Orleans.
Owner: Paul Middletown.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 108 ft, cased to 56 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 712 ft. Measuring point: Top of floor of shelter 3.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.59 ft below land-surface datum, May 15, 1983; lowest, 44.44 ft below land-surface datum, Jan. 29, 1981.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.47	35.17	10.42	10.92	15.86	27.42	26.73	4.82	8.31	24.09	29.02	39.71
10	25.75	37.08	13.90	13.67	20.56	26.75	10.61	5.98	11.40	26.15	30.72	39.95
15	27.47	34.36	15.69	18.72	23.72	28.38	9.25	3.59	16.14	26.53	33.18	35.79
20	29.51	35.19	16.56	23.35	25.54	27.81	11.38	5.52	15.01	27.40	35.52	39.85
25	31.79	16.56	9.29	19.61	26.07	27.07	16.14	6.47	19.12	29.11	37.33	40.57
EOM	33.32	12.27	7.87	21.94	26.51	29.01	10.01	7.90	22.01	31.56	38.57	41.57
LOW	37.53	37.87	19.96	24.20	26.64	30.10	30.20	9.93	22.60	32.77	39.25	41.78
HIGH	25.71	11.41	6.10	8.53	14.55	26.14	9.25	3.59	7.76	22.49	28.09	34.37

WTR YR 1983 HIGH 3.59 MAY 15 LOW 41.78 SEP 30

PARKE COUNTY

393619087043001. Local number, PA 6.

LOCATION.--Lat 39°36'19", long 87°04'30", in the SE¼SW¼SE¼ sec.33, T.14 N., R.6 W., Parke County, Hydrologic Unit 05120111, on county right of way on north side of Parke-Clay county line road, 1.7 mi east of Carbon, 2.6 mi east of State Highway 59, and 6.2 mi north of Brazil.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 155 ft, cased to 46 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 703 ft. Measuring point: Top of casing 2.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to August 1971. October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft below land-surface datum, Apr. 19, 1970; lowest, 16.34 ft below land-surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.69	14.50	14.06	13.76	13.62	13.45	13.37	13.38	13.55	14.01	14.88	15.70
10	14.56	14.48	14.14	13.62	13.54	13.53	13.31	13.51	13.68	14.04	14.96	15.89
15	14.55	14.53	14.04	13.69	13.55	13.51	13.36	13.41	13.64	14.22	15.15	16.02
20	14.61	14.39	13.97	13.75	13.56	13.35	13.39	13.52	13.73	14.46	15.28	16.10
25	14.64	14.54	13.83	13.69	13.58	13.57	13.38	13.51	13.83	14.62	15.47	16.20
EOM	14.50	14.32	13.80	13.67	13.52	13.38	13.36	13.45	13.89	14.79	15.50	16.27
LOW	14.75	14.62	14.40	13.88	13.72	13.64	13.48	13.61	13.92	14.84	15.57	16.34
HIGH	14.50	14.25	13.68	13.54	13.32	13.33	13.15	13.25	13.45	13.90	14.18	15.57

WTR YR 1983 HIGH 13.15 APR 2 LOW 16.34 SEP 30

POSEY COUNTY

380758087551001. Local number, PY 3.

LOCATION.--Lat 38°07'58", long 87°55'10", in NW¼NW¼SW¼ sec.31, T.4 S., R.13 W., Posey County, Hydrologic Unit 05120113, on property of the New Harmony Park Board, at the east edge of New Harmony.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 58 ft, cased to 54 ft, screened to 56 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 380 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.95 ft below land-surface datum, May 14, 1983; lowest, 21.25 ft below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.58	17.54	---	8.97	11.02	12.86	12.20	6.43	8.72	12.20	15.14	17.11
10	16.67	17.66	13.43	9.40	11.01	12.74	10.23	5.81	9.35	12.60	15.51	17.37
15	16.76	17.78	13.09	10.34	11.48	13.05	9.17	5.03	10.01	13.14	15.88	17.61
20	16.91	17.87	13.12	11.06	11.99	13.21	9.09	7.01	10.78	13.69	16.22	17.83
25	17.14	16.90	10.61	11.13	12.42	13.19	9.40	7.64	11.43	14.16	16.53	18.05
EOM	17.35	---	9.74	11.35	12.63	12.71	7.46	8.51	11.98	14.73	16.85	18.25
LOW	17.38	17.91	13.96	11.42	12.69	13.37	12.72	8.75	12.07	14.80	16.90	18.28
HIGH	16.38	16.90	9.74	8.83	10.91	12.53	7.46	4.95	8.51	12.07	14.81	16.90

WTR YR 1983 HIGH 4.95 MAY 14 LOW 18.28 SEP 30

POSEY COUNTY

380638087471901. Local number, PY 4.

LOCATION.--Lat 38°06'38", long 87°47'19", in NW¼NW¼NW¼ sec.8, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, 0.6 mi north of Wadesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 280 ft, cased to 200 ft, open hole.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 458 ft from topographic map. Measuring point: Top of floor of shelter 2.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from feed lot.

PERIOD OF RECORD.--November 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.99 ft below land-surface datum, Apr. 2, 1979; lowest, 139.75 ft below land-surface datum, Aug. 25, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.94	123.88	123.78	123.52	122.63	122.03	124.28					130.62
10	124.78	124.45	123.95	123.15	122.60	121.84	124.63			124.65		130.94
15	124.00	124.63	123.95	122.92	122.52	121.72	126.40			125.81		130.74
20	123.96	124.33	123.93	123.00	122.98	121.36	124.30			126.79	131.42	130.55
25	123.98	125.11	123.79	122.84	122.52	121.66	123.00			127.01	132.07	130.07
EOM	123.89	124.92	123.56	123.03	122.35	121.09	123.83			127.78	130.52	130.38
LOW	129.47	131.01	126.54	125.70	125.04	124.23	130.71			132.94	139.75	136.88
HIGH	123.62	123.71	123.42	122.53	122.30	121.09	120.85			124.24	128.16	130.07

WTR YR 1983 HIGH 120.85 APR 1 LOW 139.75 AUG 25

PULASKI COUNTY

405916086530701. Local number, PU 6.

LOCATION.--Lat 40°59'16", long 86°53'07", in NW¼SE¼SW¼ sec.4, T.29 N., R.4 W., Pulaski County, Hydrologic Unit 05120106, on private property at the north edge of Francesville.
Owner: Earl Overmeyer.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 8 in, depth 663 ft, cased to 11 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 678.60 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage and earthquakes.

PERIOD OF RECORD.--July 1956 to February 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.03 ft below land-surface datum, June 15, 1958; lowest, 20.15 ft below land-surface datum, Sept. 28, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.34	16.59	10.25	10.38	---	12.43	9.99	9.51	11.68	13.11	15.92	18.17
10	18.40	15.76	10.09	9.76	---	12.47	9.68	10.38	12.30	13.55	16.44	18.38
15	18.44	15.27	10.55	9.16	---	12.67	9.59	10.22	12.33	14.11	16.80	18.62
20	18.66	14.79	10.65	8.83	---	12.48	9.88	10.25	12.77	14.54	17.04	18.93
25	19.00	14.04	10.85	8.65	---	12.43	10.51	11.07	13.21	14.97	17.40	19.07
EOM	19.08	12.56	10.43	11.01	---	11.10	10.78	10.97	13.31	15.73	17.78	19.38
LOW	20.10	19.25	12.63	10.58	---	12.90	11.14	12.50	14.42	17.15	18.34	20.15
HIGH	18.19	12.56	10.03	8.62	---	11.10	9.52	9.34	11.36	13.00	15.80	17.93

WTR YR 1983 HIGH 8.62 JAN 26 LOW 20.15 SEP 28

PULASKI COUNTY

410739086365201. Local number, PU 7.

LOCATION.--41°07'39", long 86°36'52", in NE¼NE¼NW¼ sec.23, T.31 N., R.2 W., Pulaski County, Hydrologic Unit 05120106, in the Winamac State Fish and Game Area, 0.8 mi southwest of Beardstown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 105 ft, cased to 98 ft, screened to 100 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 715.26 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floo of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to September 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.69 ft below land-surface datum, June 15, 1981; lowest, 11.66 ft below land-surface datum, Dec. 2, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.80	10.28	8.48	8.16	8.50	8.94	7.49	6.29	7.26	8.43	9.88	10.66
10	10.82	10.05	8.09	8.26	8.54	8.91	7.32	6.55	7.55	8.76	10.00	10.80
15	10.87	9.94	8.21	8.46	8.64	8.96	6.98	6.41	7.84	9.04	10.21	10.89
20	10.91	9.85	8.27	8.63	8.76	8.81	7.04	6.55	8.15	9.22	10.27	10.96
25	11.01	9.63	8.25	8.62	8.83	8.85	7.31	6.61	8.46	9.42	10.45	11.04
EOM	11.06	9.31	8.03	8.69	8.85	8.31	6.99	6.98	8.47	9.65	10.54	11.12
LOW	11.09	11.09	9.32	8.70	8.89	9.80	8.31	7.07	8.67	9.70	10.58	11.14
HIGH	10.73	9.31	7.98	8.04	8.45	8.31	6.94	6.23	7.07	8.35	9.68	10.58

WTR YR 1983 HIGH 6.23 MAY 4 LOW 11.14 SEP 30

PUTNAM COUNTY

393254086590401. Local number, PN 4.

LOCATION.--Lat 39°32'54", long 86°59'04", in NW¼SW¼SE¼ sec.20, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in the well field of Brazil Water Works about 8.0 mi east of Brazil.
Owner: Brazil Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in, depth 60 ft, cased to 20 ft, slotted to 60 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 612 ft. Measuring point: Top of floor of shelter 1.80 ft above land-surface datum.

REMARKS.--Water level affected by Big Walnut Creek, and by pumpage from municipal well field.

PERIOD OF RECORD.--July 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft below land-surface datum, Apr. 9, 1961; lowest, 19.95 ft below land-surface datum, Jan. 15-25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.58	18.18	12.23	14.30	15.94	17.32	15.93	13.93	16.76	16.68	18.26	18.38
10	17.31	18.32	14.20	15.17	16.51	17.15	16.05	15.40	16.51	17.30	18.49	18.57
15	17.40	18.12	15.04	15.99	16.76	17.47	14.01	15.93	17.16	17.82	18.40	18.70
20	17.64	18.05	15.41	16.56	17.02	17.43	15.28	16.44	14.84	18.08	18.36	18.53
25	17.62	17.83	10.23	16.94	17.12	16.73	16.00	16.23	16.59	18.27	18.62	18.55
EOM	17.94	17.32	12.42	17.08	17.19	16.73	16.36	16.72	16.60	18.29	18.46	18.67
LOW	18.74	18.91	17.91	17.85	17.80	18.04	17.29	17.31	17.98	19.34	19.32	19.45
HIGH	17.31	17.32	8.38	13.01	15.94	16.62	14.01	13.27	14.84	16.35	18.16	18.38

WTR YR 1983 HIGH 8.38 DEC 28 LOW 19.45 SEP 16

RANDOLPH COUNTY

401532085085301. Local number, RA 3.

LOCATION.--Lat 40°15'32", long 85°08'53", in NE¼NE¼SE¼ sec.23, T.21 N., R.12 E., Randolph County, Hydrologic Unit 05120103, at the east edge of Purdue University Agriculture Experiment Station, about 5.5 mi north of Farmland.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 54 ft, cased to 33 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 970 ft. Measuring point: Top of floor of shelter 3.86 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.84 ft below land-surface datum, June 6, 1981; lowest, 15.00 ft below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.60	13.74	12.34	10.84	10.35	10.71	9.50	8.92	10.54	11.03	12.44	13.98
10	13.54	13.66	12.34	10.83	10.44	10.86	8.83	9.29	10.89	11.12	12.74	14.24
15	13.52	13.75	12.28	11.05	10.51	11.01	8.53	9.56	11.05	11.50	13.00	14.39
20	13.65	13.64	11.73	11.41	10.54	10.79	9.14	9.89	11.14	11.82	13.21	14.53
25	13.73	13.44	11.41	10.97	10.51	10.37	9.62	10.07	11.35	12.04	13.56	14.62
EOM	13.70	12.88	10.63	10.93	10.60	9.97	9.74	10.16	11.24	12.26	13.76	14.80
LOW	13.82	13.88	12.91	11.54	10.96	11.12	10.01	10.33	11.51	12.41	13.85	14.83
HIGH	13.43	12.82	10.38	10.67	10.04	9.97	8.45	8.57	10.33	11.03	12.24	13.85

WTR YR 1983 HIGH 8.45 APR 14 LOW 14.83 SEP 30

ST. JOSEPH COUNTY

414138086265101. Local number, SJ 30.

LOCATION.--Lat 41°41'38", long 86°26'51", in SW¼SW¼SW¼ sec.32, T.38 N., R.1 E., St. Joseph County, Hydrologic Unit 07120001, 4.1 mi southeast of New Carlisle.
Owner: U.S. Geological Survey

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in, depth 87.5 ft, cased to 83.3 ft, screened to 87.5ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 737 ft. Measuring point: Top of floor of shelter 3.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.50 ft below land surface datum Mar. 20, 1982; lowest 9.17 ft below land surface datum, Sept. 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.16	8.46	5.79	5.63	6.61	6.98	5.88	4.08	5.23	6.62	7.95	8.75
10	8.24	8.37	5.42	5.78	6.65	7.10	5.69	4.33	5.46	6.84	8.11	8.87
15	8.32	8.29	5.60	6.09	6.77	7.22	4.92	4.56	5.66	7.11	8.25	8.97
20	8.36	8.17	5.78	6.29	6.85	7.30	4.91	4.78	5.90	7.32	8.39	9.05
25	8.46	7.87	5.77	6.46	6.83	7.47	5.10	4.78	6.15	7.55	8.51	9.11
EOM	8.53	7.46	5.44	6.68	6.86	6.62	4.90	5.01	6.39	7.80	8.64	9.16
LOW	8.54	8.55	7.46	6.72	6.91	7.50	6.61	5.07	6.45	7.83	8.67	9.17
HIGH	8.10	7.46	5.41	5.46	6.53	6.62	4.85	4.01	5.07	6.40	7.83	8.67

WTR YR 1983 HIGH 4.01 MAY 3 LOW 9.17 SEP 30

SHELBY COUNTY

393943085490901. Local number, SH 2.

LOCATION.--Lat 39°39'43", long 85°49'09", in SW¼SW¼NW¼ sec.13, T.14 N., R.6 E., Shelby County, Hydrologic Unit 05120204, on the county right of way at the intersection of County Roads 950 North and 200 West, 3.0 mi south of Carrollton.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 150 ft, cased to 128 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Land-surface datum is 816.10 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft below land-surface datum, May 27, 1968; lowest, 22.65 ft below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.90	22.20	21.83	19.91	19.46	20.05	19.34	17.69	19.22	19.75	20.82	21.59
10	21.89	22.21	21.75	19.98	19.51	20.03	18.47	18.07	19.52	19.88	20.97	21.74
15	21.91	22.30	21.77	20.22	19.61	20.12	17.97	18.28	19.65	20.14	21.07	21.86
20	21.97	22.25	21.60	20.47	19.79	20.04	18.19	18.53	19.79	20.30	21.19	21.95
25	22.08	22.32	21.31	20.26	19.88	19.80	18.64	18.74	19.88	20.49	21.37	22.09
EOM	22.12	22.12	19.77	20.23	19.95	19.69	18.92	18.95	19.83	20.66	21.42	22.17
LOW	22.19	22.39	22.20	20.54	20.22	20.21	19.70	19.04	20.03	20.74	21.48	22.21
HIGH	21.81	21.99	19.77	19.77	19.34	19.55	17.94	17.69	19.04	19.75	20.66	21.48

WTR YR 1983 HIGH 17.69 MAY 5 LOW 22.39 NOV 24

STARKE COUNTY

411342086365601. Local number, SK 2.

LOCATION.--Lat 41°13'42", long 86°36'56", in NW¼NE¼NW¼ sec.14, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on private property in the southeast angle of intersection of U.S. Highway 35 and County Road 500 South, and 5.0 mi south of Knox.
Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 85 ft, cased to 77 ft, screened to 85 ft. Instrumentation: Water-stage recorder.

DATUM.--Datum is 712.97 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952 (random instantaneous measurements only), August 1963 to October 1966, June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft below land surface datum, June 17, 1949; lowest, 6.99 ft below land-surface datum, Aug. 2, 1939.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.26	5.26	3.67	4.51	4.65	5.07	3.65	3.06	4.33	4.20	5.30	5.82
10	6.17	5.39	4.04	4.54	4.78	4.99	3.65	3.26	4.52	4.59	5.46	5.88
15	6.20	5.31	4.22	4.72	4.87	5.06	3.21	3.53	4.64	4.92	5.55	5.90
20	6.20	5.19	4.39	4.87	4.87	4.80	3.68	3.66	4.81	4.96	5.57	5.75
25	6.24	4.98	4.08	4.73	4.96	4.83	4.00	3.89	4.97	5.12	5.68	5.85
EOM	6.25	4.68	4.25	4.82	5.00	4.35	3.47	4.17	4.96	5.05	5.74	5.90
LOW	6.28	6.25	4.73	4.87	5.02	5.08	4.38	4.22	5.04	5.31	5.76	5.94
HIGH	6.17	4.65	3.67	4.31	4.52	4.31	3.16	2.68	4.22	4.00	5.11	5.74

WTR YR 1983 HIGH 2.68 MAY 2 LOW 6.28 OCT 5, 6

STARKE COUNTY

411419086340401. Local number, SK 12.

LOCATION.--Lat 41°14'19", long 86°34'04", in NW¼SE¼NE¼ sec.7, T.32 N., R.1 W., Starke County, Hydrologic Unit 07120001, in the Bass Lake State Fish Hatcheries on the northeast shore of the lake, 5.0 mi southeast of Knox.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2.0 in, depth 17 ft, cased to 15 ft, screened to 17 ft. Instrumentation: Water-stage recorder.

DATUM.--Datum is 717.02 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.30 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.34 ft below land surface datum, June 13, 14, 1981; lowest, 3.31 ft below land-surface datum, Jan. 12, 13, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.71	1.96	1.74	2.72	2.48	2.87	2.14	1.30	1.58	.86	1.33	1.45
10	1.56	2.23	2.24	2.60	2.55	2.69	2.22	1.29	1.67	1.08	1.32	1.36
15	1.59	2.31	2.35	2.70	2.51	2.76	1.71	1.29	1.82	1.17	1.39	1.26
20	1.85	2.21	2.38	2.73	2.61	2.54	2.25	1.25	1.67	.53	1.25	1.10
25	2.05	2.24	2.20	2.49	2.69	2.52	2.36	1.40	1.54	.97	1.26	1.27
EOM	2.22	2.13	2.59	2.49	2.80	2.41	1.60	1.53	1.31	1.16	1.33	1.32
LOW	2.22	2.40	2.59	2.76	2.86	2.88	2.43	1.63	1.83	1.31	1.43	1.47
HIGH	1.53	1.42	1.74	2.47	2.20	2.27	1.60	1.14	1.31	.39	1.16	1.09

WTR YR 1983 HIGH .39 JUL 2 LOW 2.88 MAR 5, 6

STARKE COUNTY

411255086364501. Local number, SK 13.

LOCATION.--Lat 41°12'55", long 86°36'45", in NE¼NE¼NW¼ sec.23, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on state property in the public parking area at the west end of Bass Lake, at Bass Lake.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 3.0 in, depth 13 ft, cased to 11 ft, screened to 13 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 714.07 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.77 ft below land-surface datum, June 12, 1981; lowest, 3.40 ft below land-surface datum, Sept. 11, 12, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.84	2.00		2.23	2.05	2.35	1.73	1.27	1.00	1.88	2.50	---
10	2.64	2.23		2.22	2.10	2.09	1.73	1.32	2.13	2.16	---	---
15	2.73	2.24		2.23	2.17	2.23	1.44	1.38	2.20	2.39	---	2.92
20	2.72	2.15		2.25	2.19	2.05	1.65	1.44	2.33	2.10	---	2.55
25	2.78	2.09		2.13	2.25	2.05	1.78	1.64	2.50	2.38	---	2.80
EOM	2.79	1.94		2.16	2.28	1.97	1.28	1.85	2.19	2.22	---	2.82
LOW	2.88	2.79		2.25	2.30	2.36	1.98	1.86	2.56	2.50	2.52	2.99
HIGH	2.49	1.68		2.13	1.91	1.78	1.25	.98	1.00	1.43	2.29	2.55

WTR YR 1983 HIGh .98 MAY 1, 2 LOW 2.99 SEP 14, 18

STARKE COUNTY

411225086353901. Local number, SK 14

LOCATION.--Lat 41°12'25", long 86°35'39", in NE¼NE¼SW¼ sec.24, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, in southeast corner of intersection of State Highway 10 and Beach Street in Bass Lake.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water table well, diameter 2 in depth 24 ft cased to 21 ft screened to 24 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 717 ft. Measuring point: Top of floor of shelter 3.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.21 ft below land-surface datum, June 13, 1981; lowest, 4.59 ft below land-surface datum, Dec. 8, 1978.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.69	2.59	1.34	2.55	---	2.88	1.88	1.66	2.59	2.74	3.35	3.83
10	3.45	2.84	2.14	2.58	---	2.71	1.86	1.98	2.76	2.99	3.53	3.89
15	3.53	2.70	2.14	2.65	---	2.79	1.42	1.86	2.88	3.16	3.64	3.92
20	3.49	2.39	2.30	2.76	2.74	2.50	2.04	2.08	3.03	2.96	3.46	3.57
25	3.53	2.44	1.66	---	2.77	2.46	2.25	2.29	3.24	3.24	3.66	3.75
EOM	3.53	2.24	2.33	---	2.82	2.33	1.16	2.44	2.93	3.22	3.69	3.82
LOW	3.74	2.53	2.46	2.77	2.83	2.83	2.38	2.48	3.37	3.47	3.82	4.00
HIGH	3.35	1.79	1.31	2.36	2.66	1.99	1.04	.66	2.48	1.90	3.22	3.57

WTR YR 1983 HIGH .66 MAY 1, 2 LOW 4.00 SEP 18, 19

TIPPECANOE COUNTY

402543086533401. Local number, TC 4.

LOCATION.--Lat 40°25'43", long 86°53'34", in NE¼SW¼NE¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on flood plain of Wabash River, in the Lafayette Water Department well field at North Canal and Tippecanoe Streets in Lafayette.
Owner: Lafayette Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in, depth 97 ft.
Instrumentation: Water-stage recorder.

DATUM.--Datum is 520.9 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 15.43 ft above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.02 ft below land-surface datum, May. 3, 1983; lowest, 40.14 ft below land-surface datum, Aug. 4, 1944.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.24	14.87	12.60	11.14	17.10	18.59	12.10	6.73	15.55	17.47	21.86	22.40
10	17.65	18.76	13.23	12.66	14.71	18.67	13.57	9.68	19.66	19.88	20.35	21.25
15	19.29	17.16	16.15	15.89	15.38	16.54	9.08	12.52	17.84	24.98	23.68	18.83
20	17.37	16.98	15.52	13.95	15.05	18.28	9.24	13.82	19.91	24.10	22.90	19.86
25	17.03	15.58	9.70	18.13	18.44	17.28	9.75	11.75	18.25	24.52	25.30	19.56
EOM	18.89	14.20	10.31	16.98	17.03	15.04	17.75	14.61	18.16	22.29	23.06	18.65
LOW	25.97	23.82	21.68	22.99	23.43	24.65	23.11	22.45	27.80	29.23	28.51	27.63
HIGH	16.66	14.20	8.10	10.03	13.33	15.04	7.61	5.02	14.33	17.47	19.74	18.09

WTR YR 1983 HIGH 5.02 MAY 3 LOW 29.23 JUL 30

VANDERBURGH COUNTY

380608087395901. Local number, VA 6.

LOCATION.--Lat 38°06'08", long 87°39'59", in SE¼SW¼NW¼ sec.8, T.5 S., R.11 W., Vanderburgh County, Hydrologic Unit 05120113, on county right of way at the intersection of Buente and New Harmony Roads, 1.0 mi southwest of Armstrong.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 125 ft, cased to 80 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 447 ft. Measuring point: Top of floor of shelter 3.47 ft above land-surface datum.

PERIOD OF RECORD.--May 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft below land-surface datum, Apr. 3, 4, 1968; lowest, 34.09 ft below land-surface datum, Sept. 29, 30, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.42	33.38	32.72	32.26	31.74	31.33	31.31	30.74	30.83	31.89	33.01	33.54
10	33.33	33.44	32.89	31.90	31.63	31.38	30.98	30.96	31.19	32.01	33.07	33.80
15	33.16	33.49	32.58	32.05	31.59	31.39	30.95	30.72	31.28	32.30	33.22	33.82
20	33.24	33.28	32.43	32.05	31.67	31.20	31.05	30.90	31.62	32.60	33.40	33.82
25	33.42	33.42	32.19	31.83	31.58	31.45	31.02	30.85	31.91	32.67	33.56	33.89
EOM	33.34	33.21	32.26	31.78	31.54	31.24	30.73	30.75	31.89	32.80	33.46	34.03
LOW	33.45	33.61	33.41	32.46	31.94	31.67	31.39	31.97	32.10	32.94	33.77	34.09
HIGH	33.16	33.02	32.08	31.66	31.34	31.05	30.73	30.55	30.74	31.85	32.49	33.54

WTR YR 1983 HIGH 30.55 MAY 3 LOW 34.09 SEP 29, 30

VIGO COUNTY

393201087232101. Local number, VI 6.

LOCATION.--Lat 39°32'01", long 87°23'21", in NE¼NE¼NE¼ sec.34, T.13 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on property of Anaconda Industries, at the north edge of Terre Haute.
Owner: Anaconda Industries.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 138 ft, cased to 137 ft, with perforated pipe. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 511 ft. Measuring point: Top of floor of shelter 3.47 ft above land-surface datum.

PERIOD OF RECORD.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.05 ft below land-surface datum, Apr. 5-12, 1982; lowest, 52.25 ft below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.27	48.04	48.12	45.60	45.64	46.14	46.64	45.29	44.05	45.32	46.39	47.26
10	47.69	48.26	47.55	45.19	45.66	46.31	46.45	44.30	44.24	45.37	46.56	47.44
15	47.86	48.38	47.12	45.17	45.70	46.43	46.22	43.83	44.26	45.50	46.67	47.63
20	47.85	48.35	47.00	45.22	45.80	46.54	45.65	43.77	44.43	45.64	46.81	47.68
25	47.85	48.31	46.77	45.28	45.97	46.59	45.41	43.78	44.67	45.86	46.97	47.74
EOM	47.98	48.23	46.11	45.45	46.02	46.69	45.52	43.88	45.06	46.10	47.17	47.50
LOW	47.98	48.39	48.23	46.10	46.04	46.69	46.69	45.52	45.21	46.13	47.20	47.91
HIGH	47.19	47.98	46.11	42.67	45.49	46.04	45.37	43.77	43.89	45.22	46.13	44.41

WTR YR 1983 HIGH 42.67 JAN 6 LOW 48.39 NOV 16, 17.

VIGO COUNTY

392820087242601. Local number, VI 7.

LOCATION.--Lat 39°28'20", long 87°24'26", in SE¼SE¼NE¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on the campus of Indiana State University, in Terre Haute.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 70 ft, cased to 67 ft, screened to 70 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 502 ft. Measuring point: Top of floor of shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft below land-surface datum, June 7, 1974; lowest, 51.90 ft below land-surface datum, Sept. 29 to Oct. 1, 1972 .

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.91	46.39	46.01	43.93	44.28	44.60	44.76	43.46	42.84	44.21	45.17	46.03
10	45.99	46.34	45.56	43.68	44.30	44.68	44.58	42.90	43.06	44.34	45.26	46.14
15	45.99	46.33	45.19	43.73	44.39	44.73	44.34	42.46	43.29	44.53	45.42	46.29
20	46.05	46.30	45.02	43.83	44.48	44.79	44.08	42.39	43.60	44.68	45.55	46.42
25	46.16	46.32	44.83	43.94	44.53	44.83	43.72	42.50	43.82	44.83	45.70	46.54
EOM	46.28	46.23	44.43	44.16	44.57	44.75	43.63	42.68	44.03	45.05	45.90	46.61
LOW	46.30	46.40	47.99	44.42	44.58	44.85	44.80	43.63	44.07	45.08	45.93	46.63
HIGH	45.84	46.23	44.43	43.68	44.17	44.58	43.63	42.38	42.70	44.07	45.08	45.93

WTR YR 1983 HIGH 42.38 MAY 19, 21, 22 LOW 47.99 DEC. 6

VIGO COUNTY

391534087152901. Local number, VI 9.

LOCATION.--Lat 39°15'34", long 87°15'29", in SW¼SW¼SW¼ sec.36, T.10 N., R.8 W., Vigo County, Hydrologic Unit 05120111, 50 ft north of State Highway 246, behind U.S. Post Office in Lewis.
Owner: U.S. Geological Survey.

AQUIFER.--Shale and Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in, depth 201 ft, cased to 140 ft, open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 615 ft. Measuring point: Top of well casing 3.80 ft above land-surface datum.

PERIOD OF RECORD.--January to September 1983.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.68 ft below land-surface datum, May 2, 1983; lowest, 75.81 ft below land-surface datum, Aug. 23, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5				70.28	73.63	71.63	70.59	70.10	70.37	72.20	72.47	72.67
10				70.13	74.24	71.29	70.28	70.20	70.68	71.90	72.44	72.81
15				70.61	74.29	70.78	70.32	69.80	71.18	72.45	72.37	72.67
20				70.92	74.93	70.60	70.46	70.04	71.07	72.83	72.84	72.84
25				72.30	74.82	70.89	70.48	70.21	71.32	73.35	73.26	72.91
EOM				73.09	72.65	70.62	70.13	70.35	71.41	72.66	72.69	70.14
LOW				74.00	75.74	72.74	71.09	70.86	72.57	74.61	75.81	73.96
HIGH				69.99	72.65	70.47	70.00	69.68	70.21	71.72	72.35	70.14

WTR YR 1983 HIGH 69.68 MAY 2 LOW 75.81 AUG 23

WAYNE COUNTY

394426085080601. Local number, WE 6.

LOCATION.--Lat 39°44'26", long 85°08'06", in SE¼NW¼NE¼ sec.24, T.15 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on county right of way of Inter-state Road, 750 ft east of State Highway 1, and 4.0 mi south of East Germantown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 49 ft, cased to 47 ft, screened to 49 ft.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 888 ft. Measuring point: Top of collar in shelter 3.60 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

REVISED RECORDS.--WDR IN-81-1: 1980.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.07 ft below land-surface datum, Aug. 3, 1979; lowest, 21.68 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.75	17.67	17.64	15.50	15.35	15.61	16.19	14.05	14.36	15.65	17.00	18.16
10	16.91	17.78	17.49	15.30	15.27	15.73	16.00	13.77	14.58	15.85	17.23	18.31
15	17.06	17.90	17.38	15.30	15.27	15.85	15.29	13.71	14.80	16.06	17.41	18.48
20	17.23	17.99	17.26	15.43	15.34	15.97	14.68	13.81	15.01	16.27	17.60	18.65
25	17.36	17.96	17.14	15.41	15.43	16.04	14.49	13.95	15.24	16.51	17.78	18.80
EOM	17.53	17.81	16.03	15.47	15.50	16.13	14.52	14.15	15.45	16.78	17.98	18.96
LOW	17.55	18.01	17.81	16.02	15.52	16.14	16.19	14.54	15.48	16.82	18.02	18.98
HIGH	16.74	17.56	16.03	15.29	15.27	15.52	14.49	13.71	14.20	15.48	16.83	18.02

WTR YR 1983 HIGH 13.71 MAY 13 -16 LOW 18.98 SEP 30

WELLS COUNTY

404331085064701. Local number, WL 4.

LOCATION.--Lat 40°43'31", long 85°06'47", in SE¼NW¼NE¼ sec.12, T.26 N., R.12 E., Wells County, Hydrologic Unit 05120101, 1000 ft south of north entrance to Ouabache State Recreation Area, and 3.5 mi southeast of Bluffton. Owner: U.S. Geological Survey.

AQUIFER.--Silty dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 79 ft, cased to 46 ft, open end. Instrumentation: Water-stage recorder.

DATUM.--Datum is 826.04 ft National Geodetic Vertical Datum of 1929. Measuring point: Top of floor of shelter 2.35 ft above land-surface datum.

PERIOD OF RECORD.--January 1967 to current year. (Semi-annual tape-down readings only September 1971 to December 1981).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.70 ft below land-surface datum, Apr. 4, 1973: lowest, 23.74 ft below land-surface datum, Sept. 24, 1983.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.19	23.31	22.14	21.90	21.76	21.81	21.13	19.79	20.95	21.52	22.60	23.30
10	23.18	23.27	22.40	21.77	21.87	21.89	20.66	20.40	20.98	21.70	22.67	23.45
15	23.36	23.41	22.50	22.04	21.88	21.99	20.47	20.44	21.21	22.00	22.81	23.41
20	23.10	23.26	22.32	22.27	21.89	21.76	21.20	20.60	21.48	22.20	22.94	23.49
25	23.33	23.14	21.89	22.08	21.83	21.88	20.96	20.53	21.74	22.47	23.14	23.60
EOM	23.28	22.67	21.64	22.13	21.81	21.43	20.92	20.63	21.30	22.53	23.22	23.63
LOW	23.73	23.54	22.80	22.43	22.14	22.12	21.65	20.99	22.12	22.72	23.34	23.74
HIGH	23.08	22.58	21.15	21.65	21.47	21.41	20.34	19.73	20.76	21.31	22.52	23.29

WTR YR 1983 HIGH 19.73 MAY 4 LOW 23.74 SEP 24

WHITLEY COUNTY

410337085264201. Local number, WY 3.

LOCATION.--Lat 41°03'37", long 85°26'42", in NW¼SE¼NW¼ sec.18, T.30 N., R.10 E., Whitley County, Hydrologic Unit 05120104, on the county right of way of Evergreen Road, and 0.75 mi north of Laud. Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in, depth 191 ft, cased to 187 ft, screened to 191 ft. Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft. Measuring point: Top of floor of shelter 2.68 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.30 ft below land-surface datum, Mar. 27, 1976; lowest, 52.67 ft below land-surface datum, Mar. 15, 1979.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.42	51.51		---	50.91	50.78	50.83	50.23	50.27	50.70	51.23	51.45
10	51.33	---		50.62	50.87	50.76	50.54	50.32	50.46	50.84	51.19	51.53
15	51.30	---		50.79	50.87	50.87	50.50	50.14	50.55	51.05	51.35	51.62
20	51.42	---		51.00	50.96	50.63	50.41	50.21	50.66	51.08	51.35	51.47
25	51.66	---		50.81	50.86	51.02	50.30	50.20	50.84	51.16	51.56	51.71
EOM	51.50	---		50.89	50.85	50.88	50.24	50.13	50.72	51.19	51.50	51.84
LOW	51.79	51.69		51.10	51.13	51.19	50.92	50.45	50.96	51.39	51.64	51.93
HIGH	51.29	51.26		50.62	50.46	50.60	50.24	50.04	50.21	50.67	51.12	51.45

WTR YR 1983 HIGH 50.04 MAY 22 LOW 51.93 SEP 30

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\text{x}10^{1}$	millimeters (mm)
	$2.54\text{x}10^{-2}$	meters (m)
feet (ft)	$3.048\text{x}10^{-1}$	meters (m)
miles (mi)	$1.609\text{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\text{x}10^{3}$	square meters (m^2)
	$4.047\text{x}10^{-1}$	square hectometers (hm^2)
	$4.047\text{x}10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590\text{x}10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785\text{x}10^{0}$	liters (L)
	$3.785\text{x}10^{0}$	cubic decimeters (dm^3)
	$3.785\text{x}10^{-3}$	cubic meters (m^3)
million gallons	$3.785\text{x}10^{3}$	cubic meters (m^3)
	$3.785\text{x}10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832\text{x}10^{1}$	cubic decimeters (dm^3)
	$2.832\text{x}10^{-2}$	cubic meters (m^3)
cfs-days	$2.447\text{x}10^{3}$	cubic meters (m^3)
	$2.447\text{x}10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233\text{x}10^{3}$	cubic meters (m^3)
	$1.233\text{x}10^{-3}$	cubic hectometers (hm^3)
	$1.233\text{x}10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832\text{x}10^{1}$	liters per second (L/s)
	$2.832\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832\text{x}10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309\text{x}10^{-2}$	liters per second (L/s)
	$6.309\text{x}10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309\text{x}10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381\text{x}10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072\text{x}10^{-1}$	megagrams (Mg) or metric tons